

Educational Supplement

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Break

Slave market

Now's your chance

The DES is to have a routine—or so they say—going over by the Civil Service management persons.

However, serious people are paying attention. The permanent secretary, Mr James Hamilton, is to preside over the steering committee, and the head of the planning branch, under secretary Donald King, will head the review team itself.

Apart from officials from the DES and the Civil Service Department, the local authorities too will have "a distinguished representative" on the team. This will be Peter Inman who retired last year as chief executive of Lancashire County Council after working for it in one job or another since 1948. It is not an education man at least Lancashire is not one of those authorities which has had cause for vociferous complaint about corporate management.

The review will take eight or nine months and the Department has taken the usual annual stop of inviting outsiders to chip in their views of its organization and management. Now is your chance. Letters to The Secretary, DES, Elizabeth House, York Road, SE1, marked "Management review" by the end of September, please.

More from FO

Footnotes to that business of fees and fares for the children of government people serving overseas (Break, June 24). If, bowing to circumstances, you send your child to boarding school while you are overseas and you choose a school which also takes day pupils so that when you are at home he or she can live at home, rude shocks are in store.

HMG will fork out for the boarding fees throughout normal school life but if the child becomes a day pupil in the same school, will not pay the (inver) day fees. How mad can you get?

Also a matter of special privilege: other people, technical experts from the Ministry of Overseas Development, for example, serve overseas. Whereas the Foreign Office people can start their children's boarding education at the natural breaks, for example, 11 or 13, and get the fees paid even if they are living here at the time, other folk cannot. They get the fees paid only when they go to school—which could be course, be four terms before O level.

It was hot at the Schools Council governing council meeting last week (see page 5)—almost as hot as it was this time last year when the 16-plus proposals were debated.

Nor was that the only similarity. There was the representative of the Headmasters' Conference on his feet opposing the general will—"we are the real sacrificial lamb". There at his elbow the representative of the GCE boards. This time, however, Lord Alexander was missing from the opposition ranks, withdrawn since the collapse of the Association of Education Committees.

Instead the standard of the patriots was borne by Dr Geoffrey Tompkins, for the Committee of Vice-Chancellors and Principals, headmaster, no less, who takes the universities' fury at losing their prescriptive rights to pieces on the Schools Council's main body.

Indeed the indignant cries of "Why haven't I been invited?" rose to such a pitch that Sheila Brown was asked to make an intervention fitting to the head of the Inspectorate. The whole business was, she said, "like conducting a slave market in reduced circumstances". She went on to ask that when the proposals were rejected they be accompanied by some reasoned analysis of the job the council thought it was supposed to be doing. I hope the council felt suitably chastened.

Meanwhile in the plebs corner, Mr Jarvis was pointing the moral finger at the DES instigating a small council—someone would have to be put out wouldn't they? It was all the DES's fault. Was it still going to insist...?

Then there was the dispute over Clause Four. Mr John Hudson, for the DES in the right corner, pointed out what the department evidently sees as a first one. Wounded indignation from Max Morris in the left corner: "Not quite proper for the DES to be raising fundamental issues of principle at this occasion."

The issue: Clause Four (happy coincidence) of the Schools Council constitution reads, "In the execution of this constitution and the exercise of all functions conferred hereby regard shall at all times be had to the general interest of the school which should have the fullest possible measure of responsibility for its own work, with its own curriculum and teaching methods based on the needs of its own pupils and evolved by its own staff."

In the review body's report, in what purports to be simply a reiteration of the old principle, the relevant section reads: "We affirm our adherence to the general principle, set down in the present constitution that each school should have the fullest possible measure of responsibility for its own work..."

That could have an altogether more sweeping application and Mr Hudson has noticed. Afterwards in the corridors the chairman, Sir Alex Smith, was busy saying how agreeable the review body had been, how amazingly



"£135 a week? Never. Education cuts mean no lights in the corridor."

accommodating the unions had been, how hopeful, etc. Mr Jarvis, on the other hand, was in a more militant mood. If the Secretary of State thought she was going to have a school council with control removed entirely from the teachers' unions she had another thing coming. "It's a struggle for power. Let them try it—and then see how they get on with curriculum development without us."

Which all sounded like someone else threatening to take the bat and ball home before the game fairly got going. (I am indebted to Mr Tom Driver of NATFHE for the metaphor. He used it along with the work booklet to describe the universities' threat to withdraw from the council.)

It may in that context interest Mr Jarvis to know that the Nuffield Foundation's interest in school curricula has revived considerably of late. They did some good work last year and found plenty of teachers willing to help.

Poetic balance

Small poetry magazines come and go, so it is an event when one reaches its tenth birthday, as *New Poetry* (which treated life as *Workshop*) does this month. Even more remarkable—this is produced without a grant from public funds and it makes a small payment for the poems it prints. The secret lies in its editorial policy of keeping poets and publishers (who are frequently also contributors) closely involved in its fortunes, even to the extent of helping to arrange distribution and by the balance it keeps between established and unknown poets.

Its founder and editor, Norman Hildan, recently a lecturer at St. Paul's College of Education, Tottenham, and one time chairman of the Poetry Society, is remarkable for combining critical discrimination with breadth of sympathy. He believes that "wherever we find a place for any kind of verse so

long as it is honestly written. His publishing acumen has been well proved: he was one of the first editors to publish the work of Jean Cocteau.

The current issue of the magazine (available from Workshop Press, Cuckfield Court, Granville Road, London N4 4JH, at 65p) contains poems by Peter Rodgore, an interview with John Wain, a benediction and birthday greeting from Roy Fuller, and a history of the magazine by John Cotton. It also contains its regular school section, publishing in this instance two extremely elegant poems by students at the sixth-form college at Stoke-on-Trent.

In August, Mr Hildan will be introducing one of BBC 3's *Poetry Now* programmes, in which poets read hitherto unpublished verse.

In presenting his magazine, he will aim to make the point, as he does in his magazine, that there are many unknown poets of all ages whose work is well worth attention.

Jolly fun, what?

A harrier climate prevails now for the writers of children's books than ever did for those who told fairy stories through a golden afternoon on the lawns. At the presentation last week of the Ousey Award (for best children's book of literary merit), grim tales were recounted of the hazards of writing children's books today.

Sarah Cox—the author of the "People Working" series (Kestrel)—told how British Rail had tried to prevent the publication of *Railway Worker*, and Vauxhall Motors the publication of *Car Worker*, while she and her partner, the photographer Robert Golden, were met with doubt and suspicion by the controllers of people working—management and unions alike.

Frederick Grice, who gained an award "for the body of his work" could not really match this—at least he did not relate how his second (and perhaps his last) book *The Bonus Pit Ladder* was turned down by the publisher of his first book—Jonathan Cape—on the grounds that children's books were no place for social satire. It was left to Farquhar Dondly, who won an award for *East End of Your Feet* (Macmillan Topliners), to confirm reports of the seasonality of the National Endowment for the Arts.

At least it was good to hear that the remaining winners of the Ousey Award arrived on the market relatively unscathed. Gene Kemp's *Turbulent Term of Tyke Tiler* (Faber). This story for younger readers is however to be shortlisted for the Ariadnes award for the best children's book of the year. A prize for not being biased. From the outset the author sides firmly with her heroine against all the forces of reaction, whether these be traditional school teachers and "real" education, or whether they play musical instruments and

make computers out of bits of wire, or critics who foolishly object to working-class children in Exeter speaking with a sub-cockney accent.

One incident in the book, however, is of particular interest. At one stage of the story Tyke Tiler's dad is standing for election to the local council (we are not told his party, but we do learn that his favourite song is "The Red Flag"). By way of a joke Tyke Tiler and her ESN friend Danny go and plaster their father's electioneering posters all over the front of his opponent's house. This is presumably regarded as a jolly good fun by the awarders who object so much to slogan-painting in practice.

Traffic sense

Where would you expect to find RSOs, ROSPA, TRRL, the police and a well known educational publishing house roped together at the same time? Answer: at the launching of Macmillan's new set of road safety books for five to 13-year-olds.

The Royal Society for the Prevention of Accidents and the Transport and Road Research Laboratory have supported the venture (ROSPA already has attractive, visual aids on the market which can be used in conjunction with the books), the police applaud it and the Road Safety Officers will help to implement it, though this will be mainly by the teachers' job. All three books (£125 each), in the "Children and Traffic" series are brightly illustrated and directed at teachers. They are full of all kinds of activities, some to take place outside school, many involving other subjects. For traffic education is not meant to be thought of as a subject itself, but rather as a means of building up children's understanding of traffic and developing an instinct for safe behaviour. This might be done in a few minutes each day or in any way the teacher prefers.

The series has been designed with the help of teachers and carefully evaluated in 96 classes in different types of primary school all over the country. The project needs a long, felt need. Traffic education being, as Dr Ken Jolly, author and project leader, says, "a matter of life and death". Children are more than five times as likely to be killed or injured on the roads as adults, and traffic accidents are the biggest single threat to children's lives.

Among those invited to the launching were Shirley Williams, Sir Robert Mark, Norman St John Stevas and Jimmy Saville. Unfortunately, none of the celebrities found the time to turn up.

Aristides

Next week

Dorothy Kuya looks at racist bias in school textbooks. Francis Beckett examines the fight to save village schools. John Petherbridge on educating the children of battered women.



Light the Green Paper and retire . . .

When Mrs Thatcher's White Paper—*A Framework for Expansion*—went to Cabinet at the end of 1972, discussion was held up while Ministers complained that, though it was full of proposals for the allocation of (as it turned out, mythical) resources, it had nothing to say about "real" education. The objection was brushed aside. Mr Edward Heath said he would make a speech on the subject which he duly did to the Society of Education Officers, a few weeks later. His speech was as empty and vacuous as any speech day oration. But the revolt in the Tory Cabinet was a timely reminder of so much official discussion of education policy.

Mr Callaghan has changed all that. He, too, made his speech-day speech—at Ruskin—but in so doing, he demanded the kind of policy statement on education which had been missing from earlier White Papers. Mrs Williams's Green Paper is an attempt to set out the official view of what primary and secondary education is about and to outline ways in which practice can be brought more closely into line with public priorities.

Taken at this level, the Green Paper is a commentary on the social purposes of education. It discusses not only the need for competence in formal skills, but also the importance the Government lays on the contribution education can make directly to specific social policies—to creating favourable attitudes towards industry and the mixed economy, democratic participation and so on.

As might be expected, much of this comes out as unctuous platitudes. But the schools have often repelled to their critics that they are the servants of society and that their task would be made easier if society's wishes were more clearly articulated; nobody can now seriously complain if this is one of the things the Green Paper tries to do.

What most people will want to know, however, is what is going to be different if the proposals of the Green Paper are carried out. Most of the proposals it lists have already been announced or set in motion. The section on standards and assessment, for example, adds nothing to what has already been said about the Assessment of Performance Unit and the review of examination at 16-plus, 17 and 18, except in so far as it (rightly) expressly rejects the idea of fixed, nation-wide tests at particular ages. It confirms, however, what has been plain for some time, that there is going to be a lot of over-testing and testing-mania unless the I.e.a.s and the teachers keep their heads.

The section on curriculum returns, repeatedly, to the idea of a core of essential studies which may need to be "protected"—i.e. prescribed nationally. This, however, is all in general terms; action will take the form of the "Curriculum Review" which each I.e.a. will be invited to carry out on lines which are to be discussed with the authorities and the teachers in the next future. This is clearly seen as the first stage in a larger process of coordination and review in which the DES would take a hand at every stage, the aim being to establish "a framework for the curriculum".

The other main section which is likely to lead to action, is that on "teachers"—chapter six, which discusses initial and in-service training, and the management of the teachers in the schools. Though integral to the achievement of all the policies discussed, the need for action stems less from the Great Debate than from the sudden change in teacher recruitment patterns.

It is already obvious that unless some teachers take early retirement, the avenues of promotion will be blocked. There is nothing unique to teaching about such a situation.

Many large industrial companies have had to evolve staff development policies capable of dealing with such blockages. These do not need to be lacking in humanity. Too much emphasis in the discussion up to now has been laid on the punitive aspects—as if this were all about rooting out incompetents. It certainly is important that those who take early retirement should be the less good, rather than the better teachers, and this ought to be reflected in policy. But what is needed—and is likely to come from the new policies the DES is now pressing on the I.e.a.s and the teachers—is a balanced approach which includes early retirement, better methods of selection for responsibility, better reporting and assessment, more in-service training, and retraining. The Green Paper rightly does not shy at the question of sacking the grossly incompetent and the necessary procedures for assessing and, if necessary, dismissing teachers.

Does it all add up to a "turning point" in educational history? In the sense that something—the role of the DES—will never be quite the same again, it is a turning point. But much of it is unremarkable and familiar. Including the feeble little section on "Resources" which warns of two dangers: "ignoring economic restraint, and believing that economic restraint makes all improvement impossible. But the Green Paper fails to say what the schools should stop doing in order to do the new things which the Government now believes to be desirable.

No comment

Students not following the creativity course will attend the Romans in Southern Britain course and either the defence of Portsmouth course or the history, science and practice of wine and beer making.—Extract from instructions for new students at Portsmouth Polytechnic.

Fallen into disuse

Cambridge, the last university to insist on candidates for admission having a Use of English qualification, has decided to drop it from next year.

Village warfare

Have small rural schools any chance of winning their fight for survival? Francis Beckett reports.

Black marks

Dorothy Kuya believes teachers should be more critical of the racist and imperatist messages in many school books.

Extra:

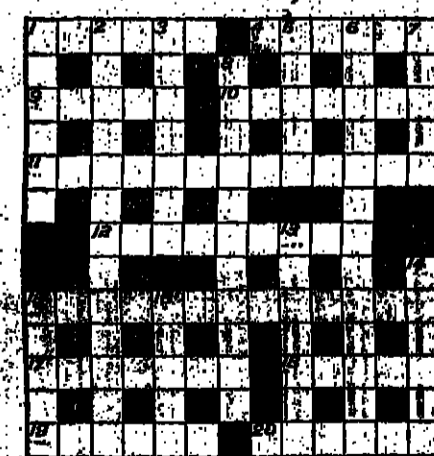
Building, equipping and furnishing a school—pages 23-26.

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Classified ad

Index

Crossword No 1,094



Across

- 1 A lack in a feature... 15 Talent scout in the... 16 Natty nut (6)... 17 Pasting out cannot be easy for him (7)... 18 Often the object of a... 19 Obviously promote... 20 Getting a slight of... 21 Inappreciated in the... 22 Flower in the grass... 23 River to cut off the... 24

Down

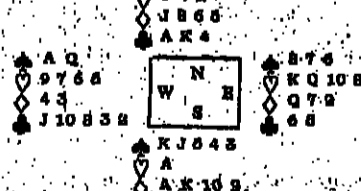
- 1 Branch out in a... 2 How... 3 Give one a... 4 Autumn... 5 The... 6 A... 7 A... 8 A... 9 A... 10 A... 11 A... 12 A... 13 A... 14 A... 15 A... 16 A... 17 A... 18 A... 19 A... 20 A... 21 A... 22 A... 23 A... 24 A...

Across

- 1 A... 2 A... 3 A... 4 A... 5 A... 6 A... 7 A... 8 A... 9 A... 10 A... 11 A... 12 A... 13 A... 14 A... 15 A... 16 A... 17 A... 18 A... 19 A... 20 A... 21 A... 22 A... 23 A... 24 A...

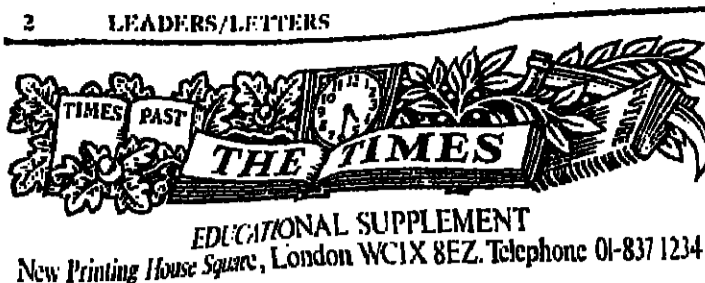
Bridge

Greedy and a cunning defence sank declarer without trace on this deal:



Playing... Greedy and a cunning defence sank declarer without trace on this deal: 1. South leads the 10 of spades, two guarded, four spades. West led the three of clubs, declarer played the ace from dummy, and East began a signal with the six. Declarer was unswayed. Two spades and a diamond seemed to be his maximum losses, and if the finesse were right he might even make 12 tricks. So he led the 10 of spades from dummy, and West set his trap by winning with the ace, not the queen. West could see little hope for the defence. If South had six spades there was no hope at all, but if he had only five, then West might be able to give his partner a club ruff. He knew that if the contract depended on a finesse in a red suit, declarer was home and dry. Having won with the ace of trumps, he returned a second club. Greedy now deprived South of his reason. West led the 10 of trumps clearly "marked" East with the queen, so South could pick her up with a second trump finesse, and then if the queen of diamonds dropped in two rounds he would make 12 tricks. He therefore won the second club lead with dummy's king—East completing his signal—and led the nine of spades, suffering a nasty shock when the queen emerged from the dummy. A heavier one when a third club from West was ruffed by East's remaining king. Greedy led with a heavy heart, and there was now no way to return to dummy for a diamond finesse. The defence thus got four tricks to defeat the contract: A, Q of trumps, a club ruff, and the queen of diamonds. It competes in the West's play of the ace of trumps on the first trump lead might cost a trick and even a poor score, but in rubber bridge it will seldom lose and often gain. But South still played badly. So he should win the second club lead in his own hand, and lay down the king of trumps. In this particular deal it guarantees him 11 tricks, but it also secures the contract against any trump distribution. West's coup was a sensation when it first appeared many years ago,

John Graham



Pay claims and cash limits

The Chancellor's July package marks the beginning of a period of uncertainty for the schools and for higher education. But even as Mr Healey keeps his fingers crossed and hopes against hope that there will not be a general wages explosion, it is already possible to spell out some of the immediate consequences.

An ingenious compromise has remained the full school meals price rise of 10p to 25p a day, due to take effect next term, but has softened its effect by easing the parental means test scale so that children will be eligible for free dinners. (This is half as many again as now qualify, but only 850,000 now claim the free meals they are entitled to, so actual uptake is likely to be less than a full 500,000 more.) The local authorities will have to find about £9m a term more to pay for the extra free dinners: all the Chancellor said about this was that discussion would continue on how to disseminate them. It sounds as if some way will be found; the Government is well aware of the trouble which would follow if the extra money had to be found from savings elsewhere in local authority budgets.

The greatest uncertainty arises from the way in which the 10 per cent pay norm is operated. The door has been opened for much larger claims. Although the Chancellor stated that there will not be much scope for correcting anomalies, there is no doubt that many claims will be put forward as special cases and that employers, including public authorities, will have the greatest difficulty in sorting out the most deserving.

Few occupational groups have a better claim to favourable treatment than the university teachers who were clobbered by the introduction of Payscale One, and have been placed at a quite unfair disadvantage alongside the Houghton-refreshed poly-

Calling the tune

There is only one unexpected and significant sentence in the recently published Finance Green Paper concerning the Government's reactions to the Layfield report: "The Government's view is that there is a case on grounds of national priorities for some modest increase in the proportion of Government aid payable on specific or supplementary grants, particularly in relation to the education service, therefore reducing the proportion paid on a block grant."

For more than 100 years the award has been the other way—for specific Government grants for education to be gradually assimilated into the block grant to local authorities. The sudden reversal signalled by that sentence has been applauded by some educationists, but greeted with cries of alarm by most schoolteachers. Is it a threat to local freedom? Would specific grants in fact mean a loss of local freedom?

Between the wars, education was paid for through percentage grants. This meant that central Government paid some proportion of the cost of education which it had itself approved; for example, it might agree to pay 60 per cent of teachers' salaries. In 1929, when the authorities' services were taken together in a general grant, education still retained its specific grant. It was not until 1958 that this grant for education was finally assimilated into the general (now rate support) grant.

Education did fairly well out of the percentage grant system, but it also meant that central Government could keep a close check on how much each local education authority actually spent on education. Even under the new system—at least until 1974—it was still possible for central Government to exercise some measure of control. It could, for example, influence education spending by local authorities at least marginally by varying the amount that was included for education when the total amount of grant came to be calculated.

These calculations were biased to a large extent by "need" generally defined in terms of numbers. Thus if central government had been, for sake of argument, estimating its education grant on the basis of £5 for each primary school and £10 for each secondary school, and if the standards of primary education improved, it could increase the amount it put into the overall grant by raising this £50 to, say, £55 or £60.

This meant two things: those authorities with most primary schools would get most of the additional grant; and, as the higher payment was public knowledge, there was an obligation on each local authority to spend that extra money on primary education. The obligation was not a financial sanction which central government could use against a recalcitrant local education authority. It was

Specific grants from central government give local authorities more, not less, control over what they spend, writes RICHARD JACKMAN

spend. Similarly, there is no way the Secretary of State can tell whether any individual local authority is spending the amount she would like.

But the system is even cruder than that. Changes in the distribution of the grant due to the workings of the formula bear no relation to the amount a local authority may be spending on particular services either. The formula works in such a way that if, as has been the case, inner cities as a whole are to be spending more money than say, county councils as a whole, the inner cities will get a bigger slice of the cake. But they would get it as a result of changes in the formula which specifically characterise inner cities—say, decline in population—even if the extra money they had been spending was in fact on education.

It is impossible, therefore, for a local authority to consult the formula and work out for itself what it should be spending on a particular service. By the same token, it is impossible for central government to look at the amount an individual authority is spending on a particular service and say that it is too much or too little.

A return to specific grants would be one way out of this impasse. The advantage is that the money would be paid only if the service was actually provided.

The main objection to specific grants is that they deprive local authorities of discretion in allocating their expenditure.

But the freedom of the block grant is illusory. It is inconceivable that central government would pay out any money—let alone the £6,000m of the rate support grant payable this year—and then take no interest in how that money is spent. Because under the block grant system it has no financial sanctions at its disposal, it has created a vast range of instruments of administrative and legislative control.

Of course, on many issues there will be no disagreement—a consensus will have emerged accepted by local authorities and central government alike. The freedom allegedly provided by the block grant is meaningless unless it allows local authorities to differ from the consensus as well as to conform to it.

With specific grants, local authorities are, in a much more real sense, free to provide the services (and receive the grant) or not. Because central government does not pay the grant if the service is not provided, it need not feel obliged to ensure through administrative means that local expenditure is allocated in accordance with its preferences. Local authorities can always continue to provide particular local services financed from the rates.

Richard Jackman is an economic lecturer at the London School of Economics and a member of the Centre for Environmental Studies review team.

The aye has it—and Tory all-in ruse fails

Comprehensive reorganization plans for the borough of Trafford in Lancashire have been approved. But only one person voted in favour.

The rebel authority, which held an unusual reorganization until the last possible moment, has finally agreed to submit its comprehensive scheme to the Education Secretary. And it was a lone Conservative vote in the council meeting which ensured that the authority kept to the letter of the law.

Trafford's scheme, which sets up three sixth form colleges from the borough's eight grammar schools and turns the rest into comprehensives from 1981, was drawn up by a working party of 10 Conservative councillors, one Labour, one Liberal and seven teacher representatives.

At this month's council meeting Labour and Liberal opposition members were astounded when the Conservative leader said the Tories would abstain when the plan was put to a vote. The council's chief executive was asked what would happen if no one voted for the scheme and the reply was that the plans would be void and the whole process would have to be repeated.

After hurried discussions on the Labour benches it was decided the opposition would also abstain. When the vote was taken the Tory vice-chairman of the education committee, Mr Johnathan Taylor, was the only councillor to vote in favour. Everyone else abstained.

Mr Allan Croupe, chairman of the education committee, said this week: "The Conservative group were told by the leader during the debate that the Conservatives, notwithstanding their wish to comply with the law, would abstain. He said we were not committed as a group to reorganization in the borough but as we had to reorganize by law we could abstain and allow the Labour plan to be implemented. This caused great consternation on the Labour benches and they decided that they would abstain also."

"It was a tactical move to fox our opponents. I think the group leader thought that if we abstained, the Labour members would put the plan through."

Mr Croupe said the reorganization scheme was the best possible for Trafford bearing in mind the compulsion of the law. "It is only because we have been compelled by law that we have submitted proposals. Of course, we would be happy to see them not put into practice."

Mr H. Pyper, a Labour councillor, said he and his colleagues felt it would have been wrong to vote for the Conservatives' "devious resolution." "It is quite unethical for them to do such a thing as this. We are absolutely disillusioned with the law, would abstain. He said we were not committed as a group to reorganization in the borough but as we had to reorganize by law we could abstain and allow the Labour plan to be implemented. This caused great consternation on the Labour benches and they decided that they would abstain also."

Meals shock: price up 10p after all

School meals are to go up in September from 15p to 25p as planned despite widely circulated rumours that the cost would be pegged as a concession to trade union demands.

Mr Denis Healey, the Chancellor of the Exchequer, announced the rise last week in his mini-budget. "The increase will bring in about £30m a term."

The Chancellor also increased the income limits for free meals. A family with two children will now be able to claim free meals if its gross income does not exceed £60 a week. The new income limit means that, if all families exercise their new entitlement to free meals, an extra 650,000 children will not have to pay for school lunch.

The Department of Education estimated this week that about 1.5m children would be eligible for free meals in September. About 850,000 now claim them. Free school meals will cost about £18m this year and £28m next year.

Detailed calculations on the net income limits for families have still to be worked out, but Mr Frank Field of the Child Poverty Action Group said that parents would not thank Mr Healey for the measures.

The take-up rate for free meals had fallen from 85 per cent of those eligible to about 75 per cent, when he made it clear that pay settlements in the public sector would have to fit in with his new guidelines aimed at keeping the growth of national savings to 10 per cent. Nor would restrictions on local authority spending be relaxed. Strict cash limits imposed earlier this year were to remain.

Life still in White Lion

The experimental White Lion Street Free School in North London is almost certain to continue until next Easter following offers of money and support totalling £11,000 by the middle of this week.

On Tuesday the Inner London Education Authority decided by 18 votes to 15 not to grant-aid the school to the tune of £20,000 a year. On Wednesday the London Evening Standard published a front-page appeal asking for support.

The school, in a run-down part of Islington, has successfully educated 50 children for five years—many of them persistent truants in previous schools—and was threatened with closure when grants from foundations dried up.

Mr Peter Newell, a worker at the school, said all the staff felt the Labour-controlled ILEA was still the "logical source of funds", and they would continue to press for more money. They were confident that the Department would be working or competent, examiners more erratic, or that today's curriculum is less worthwhile.

But the board admits that it is extremely difficult to ensure serious comparable standards in the different subjects; the same subjects from year to year, alternative papers for the same subjects, and among different exam boards.

Though the prime concern of every board is to maintain comparable standards there is no hard evidence that teachers have been successful. "Comparability studies can be expected to lead to clear conclusions only if there are major divergences of standards", the JMB says.

Only when a number of different comparable courses are used together and all point the same way can reliable conclusions about consistency be drawn. But this multi-method approach has never been tried.

Exam board joins the don't knows in debate over shifting standards

Examining standards may not be as consistent as they once were because of the much wider range of syllabuses for each subject and the greater variety of assessment methods schools could now use.

Ensuring comparability of grades is made more difficult by the increased choice of options or alternative syllabuses for each subject and the greater variety of assessment methods schools could now use.

There is still a strong element of subjectivity in GCE examining, the JMB says. Discussions about examinations and standards in the Great Debate had often assumed achievements could be measured against some clearly specified standards of attainment. "Experience shows that examiners cannot easily define with precision the criteria they employ in awarding grades and such difficulties have probably even been attempted in the majority of existing examinations", it says.

For teachers to carry forward in their minds from year to year the yardstick to be used was not easy 50 years ago when examinations were relatively simple and entries more homogeneous. Now it is even more difficult because of the variety of examinations and syllabuses.

There have been developments in objective testing and computers have been used to improve the accuracy of many aspects of examining, but it is debatable whether examining at 16 plus is more or less accurate now than 20 years ago.

It is not for the examining boards to decide whether consistency in public exams should take precedence over consistency in curriculum, but it is an issue to be faced in the discussions taking place about core curricula and educational standards, the JMB concludes.

Pep talk

Local authorities are to be asked to make better use of their nursery schools, day nurseries, childminders and playgroups, whether run privately or by the council. A joint circular urging greater coordination of pre-school services is being prepared by the DES and DHSS for publication this autumn.

The circular is a follow-up to one sent out in March last year, which advised all local authorities to set up machinery for joint planning. They were invited to write in about what they were doing and how they wanted to develop their services. Some authorities are understood not to have replied.

Among suggestions for rationalizing and reconciling pre-school care and education are centres combining a school, a nursery, a medical service and other extras such as toy libraries in which professionals, amateur volunteers and parents could all be involved.

The heavy brigade

A noticeable feature of the Conference of Local Education Authorities at Brighton last week (back page) was the heavy-weight delegation from the Department of Education. As usual, the Permanent Secretary, Mr James Hamilton, the team included Mr John Hudson, the deputy secretary within whose remit curriculum questions fall, Mr Edward Simpson, the deputy secretary who is in charge of the department's planning, and Miss Sheila Brown, the senior chief inspector who was also one of the main speakers. The L.E.A.s, too, seemed better represented than last year when there were some ostentatiously economical absences.

The Department has regretted the passing of the Association of Education Committees, while recognizing that, given the facts of re-organization and the nature of the new management, the main local authority associations were unlikely to be determined to force it out of business. But the DES badly needs to keep open lines of communication to the people who administer education at local level; the impressive turnout last week was the Department's way of showing this and doing its best to build up CLEA as a representative body.

As a sign of the times, the local education authorities had chosen to make the curriculum the main theme of their discussion, with Mr Arnold Jennings and Dr Harry Judge arguing from their separate viewpoints against the simplistic attractions of common cores and the common curriculum, and Miss Sheila Brown, offering tantalizing glimpses of forthcoming HMI publications. Much of Miss Brown's address was taken up with an emphasis on the historic independence of the Inspectorate, and the oblique references to the tug between the two bodies in their work on curriculum matters.

Letter to the Editor

Why 65 into 140 will go

Sir, Whoever edited your report on the proposed sixth form development at Horsforth obviously cannot have had his mind on the figures quoted—or was it the fact that a total of 65 for a sixth year class size would be desirable? The figure of 140 for a developed sixth form.

A brief inquiry to the head would have revealed that the 50 A level students and 16 non-A (not by any means planned as following a course of study) represent 42 per cent of a fifth year of 156 pupils. These were the school's original first year admitted in 1972 when we opened as a West Riding secondary school.

At that time, selection at 11 still operated, the first having the four- to five-form entry grammar school and three six/eight-form entry secondary schools, priority of parental choice being accorded to the more able and each of the non-selective schools receiving a levelling of 40 selective pupils.

Selection was thus available to over 40 per cent of the age group. Conditions for the larger 1973 intake of 176 were similar, but by then more parents were opting for Horsforth. It was not until the following year, 1974, that the school received its first fully comprehensive intake of 198.

It will be seen that, with 66 in the first year sixth this September, our reaching a total of 140 in 1978 was hardly ever in doubt, less so when we opened in 1973. There has been no indication of a fall in secondary numbers in this area of Leeds, a pattern which is also found in other peripheral areas of the city.

The present six-form entry phase of the school was designed for eventual development to six form entry plus sixth form and as such included aspects of curricular and social provision for a sixth form, at present misused. Parents and staff have from the outset been given to understand that the West Riding's stated policy of adding a sixth form when 16 plus demand warranted it would apply. When recording their choices, parents have been assured in writing of parity of provision for all between the four schools.

All the specialist staff needed to meet the subject choices of these would-be sixth formers are already

Tyndale appeals turned down

Three of the teachers who figured in the William Tyndale Junior School controversy were finally sacked on Monday.

A three-strong staff appeals committee of the Inner London Education Authority upheld an internal tribunal decision that teachers—Mrs Dorothy McColgan, Mrs Jackie McWhirter, and Mr Steve Felton—were guilty of indiscipline for their part in the dispute at the school in 1975 and should be dismissed.

The committee, headed by Mr John Branagan, heard appeals by the headmaster, Mr Terry Ellis, and his deputy, Mr Brian Haddow, earlier this week.

Court rules against reprieve

The chance of parents of the 550 boys at St Marylebone Grammar School keeping the school open against the Inner London Education Authority's plans to close it now looks remote.

Three Appeal Court judges have ruled that the authority was not abusing or misusing its powers in proposing that the school, founded in 1792, should admit no more pupils and be gradually phased out.

Last month the parents' association obtained an injunction temporarily halting the ILEA's plans. Lord Denning, Master of the Rolls, ruled on Tuesday that the court had no right to interfere with the Act of Parliament (in this case, the 1976 Education Act), which compels all local education authorities to open comprehensive schools if they can be shown the ILEA had sufficient powers. He could find no evidence of this.

The ILEA should not be stopped from exercising its statutory powers unless there was any real prospect of court action seeking a permanent injunction.

Education

AEC journal sold for £30,000

It is now certain that Councils and Education Press, which publishes the weekly journal *Education* and the *Education Committee Year Book*, is to be taken over by an outside publisher. This will sever the present financial connexion with local authorities and their education committees.


A meeting of the executive of the Association of Education Committees, which owns the company, was expected yesterday to agree to sell their shares to the Longman Group for £30,000, probably with effect from August. Publications and editorial services, School Post, will continue. Only the future of the *British Journal of Educational Technology* has yet to be settled.

There was hope that, once the deal was done, the future of *Education* had been separated from that of the AEC, it would become the natural organ of the Council of Local Education Authorities, which replaced the AEC as spokesman for the L.E.A. education committees of both the Association of Education Committees and the Association of Metropolitan Authorities—were in favour of this. They even carried out a poll of chief executives of L.E.A.s, which showed a majority in favour of some financial support for Councils and Education Press.

But a meeting of the AMA policy committee last month turned the idea down flat. Although the ACC might have been prepared to go it alone, the financial position made a quick settlement essential and the deal with Longman went through.

There will be no obvious change in principles or policy.

ANNOUNCEMENT



In response to the very considerable restraints placed upon school budgets—

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JAMES HAMILTON

Now it's disuse of English . . .

Cambridge University, the only remaining university to insist on a pass in Use of English as an entrance requirement, has decided to waive it from 1978. A letter has gone out to schools telling them that candidates for admission will in future be able to offer a grade A, B or C pass in O level English language.

Since November, 1975 when Oxford HEBMADAL Council decided that the Use of English should no longer be a compulsory requirement for admission, Cambridge alone has insisted on it for all candidates entering in the United Kingdom.

Introduction of the paper arose from the appointment in 1959 of a Cambridge University syndicate to ensure that candidates, without necessarily qualifying in a classical language, should at least show evidence of a sufficient general education.

Oxford and Cambridge adopted a scheme leading to the compulsory Use of English from 1965 onwards. They were followed shortly afterwards by the five northern universities comprising the Joint Matriculation Board and very soon all the GCE examining boards, except the University of London, offered Use of English or acceptable alternatives.

The Joint Matriculation Board was the first to announce that it had decided to accept a pass in English language at O level as an alternative to a pass in the Use of English. Others followed and by the end of 1975 only Cambridge retained the paper as a compulsory requirement.

Although the university's matriculation board normally accepts a grade I pass in the Certificate of Secondary Education as equivalent to an O level pass, this will not be the case in English unless the board is satisfied that the papers taken by candidates include a test of English language like that provided by the GCE papers.

by Bert Lodge



Storyteller Sir Bernard Miles, at the opening this week of the Children's Books of the Year exhibition at the National Book League, London.

Careers work gets short shrift on timetables

by Mark Jackson

Two-thirds of the schools in a survey undertaken by the National Association of Careers and Guidance Teachers allocated less than the equivalent of a quarter of a teacher to timetable careers work. Half the schools provided no more time than this for pastoral work.

The survey, which was submitted to last week's annual conference of the association in Llandaff College of Education, Cardiff, showed that two-thirds of 2,198 teachers designated for guidance work in the 275 schools surveyed had received no training in careers and counselling. Only 6 per cent of them had more than one week's training.

But just under a third had been released for some kind of work observation or experience in industry before entering teaching.

Most of the schools had some visiting speakers from industry and arranged for some, but not all, their pupils to visit industrial concerns. More than half provided work experience for some pupils, but only six per cent provided it for all. About half the schools devoted periods to careers education, and rather fewer incorporated work preparation in the teaching of specific subjects.

The association does not claim that the sample studied is representative of schools as a whole, but considers that since the schools concerned are mainly those in which its active members are working, it is likely to present a rather favourable picture of the overall situation.

Resentment is mounting among careers teachers at what they see as the hollowness of the emphasis placed on their work in the Great Debate.

Despite all the talk, they told the Llandaff conference, careers work is being starved of resources and in many places, actually cut back.

Time allocated to careers work in most schools is still limited. Little is being starved of resources and, lists. Careers posts are among the first to go when teaching staff is cut back.

Few local authorities were using the £7m provided in the rate support grant for in-service training. Some designated purpose, said the retiring president, Mr Ray Heppell.

Outside the formal sessions, members expressed fears that while further direct government action would be taken to strengthen the careers service, the needs of the Holland programme and cope with youth unemployment, careers teaching within the schools would continue to come off badly.

A major factor in the success of careers officers in focusing attention on the careers teaching is that they are directly represented through their institute on various national bodies.

The conference passed a resolution urging members to try to bring their unions or federations to step up to service training. It also called on the Government and local authorities to provide more resources for careers teaching in schools.

In a resolution welcoming the Government's decision to implement the Holland recommendations, the conference called for maintenance allowances for the over-16s who stayed in full-time education; full career guidance and counselling services in all schools and colleges; special regard to the employment problems of girls; and positive encouragement for employers to take on more of the 16 to 19-year olds.



'Vested interests' stall on sixth form change

The proposals to broaden the sixth-form curriculum are in danger of being defeated by those with a vested interest in the present "university fodder" system of A levels, says ILBA's staff inspector for science.

Science education at present seemed designed right from the age of 11 in the interests of the small number who would go to university to study pure science and subsequently get a PhD, Dr John Spivey, who is also chairman of the Schools Council science committee, told a conference in Sheffield last week.

There were "fundamental educational arguments" in favour of the plans to replace A levels by N and F levels, he said at the conference on the future of science education. But those with vested interests in A levels would prove stiff opposition, he warned. "I don't blame them. If I were a teacher I would not welcome a narrowing of the type of chemistry I had to teach."

He accused many universities of taking "an extremely narrow minded view" of the N and F proposals. That view was not justified. Already undergraduates qualifying for science courses with OND, the International Baccalaureate or Staff-Field Physical Sciences had proved acceptable and able to cope.

Science students in the future might cover less of the subject but their maturity of understanding and of handling ideas would be the same. In any case, it was no longer possible as it had been in the 1940s

to reach the frontiers of a subject like chemistry within the span of a three-year degree course.

Mr Norman Booth, HM staff inspector for science, said such a form of unified or integrated science course was the most logical thing for 11 to 16-year-olds. Everyone needed some science, he said, not just those who were going to be scientists, if sensible democratic decisions were to be made about such things as the siting of a power station and energy conservation.

It was no good children just learning that sulphur dioxide was a smelly gas obtained from heating certain substances in the laboratory and not that it was a by-product of a coal-burning power station with a deleterious effect on flora, fauna and our cities.

The most pervasive common problem of all is that of youth unemployment. Those who argue that if only the Government did this or that, the problem would go away, have to explain why it exists in every Western country, irrespective of the dominant political view in each. Yet, we have hitherto made little effort to learn from each other's attempts to ameliorate it—least of all in respect of the part that education and training can play.

Yet what policy consequences flow from this realization of common problems? Our differing governmental policies, our different structures, prohibitive a common curriculum, or a common system of progression from general to vocational education, or common policies for the integration of work experience with continued education and training.

I suspect that we have no choice but to adopt the Anglo-Saxon or North European approach, seeking to make haste slowly, and devising practical if minor schemes of co-operation. There is no reason why the appropriate national authorities (in some cases government departments, but in ours the Schools Council) should not discuss, together model, but not compulsory, schemes for the teaching of European culture and history.

There can be no objection in principle to discussing the wider context of education, of teaching, of qualifications, and the preservation of career and salary structures for those who teach for a period in other than their native countries, so as to facilitate teacher exchange. There is no better way to improve language teaching.

We should certainly find it no more difficult to develop common schemes of craft training than it is to secure comparability of professional qualifications. This would be a task for the trade unions as much as for governments, education, and employers. So too would the exchange of young people, presently unemployed, for work experience and associated training, with the benefit of spreading linguistic competence and widening social horizons.

What we lack is not ideas but the will, the energy, and the spirit of cooperation necessary to turn them into reality in this millennium.

Starved of cash, say staff

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Two weeks ago I was the only British representative at a small colloquium in Paris. Most of the dozen people present were distinguished educationists or ex-government ministers. We met to discuss possibilities for European cooperation in education, and how the curriculum could be designed to include both the transmission of the common culture and vocational training—each viewed from a European rather than a narrowly nationalistic perspective.

As so often in such gatherings, we were able to agree easily enough an objective, but in two days came to very different conclusions about the means of implementing them. We shall, of course, meet again—but I suspect the task will prove little easier the third or fourth time round.

In any event, there was one difference of approach among the participants which in my experience commonly bedevils international conferences. I shall not try to explain, Francophones usually seek first to elaborate a theory upon which to build a comprehensive scheme, while the Anglo-Saxon, Teutonic, and Scandinavian races like to begin with the examination of practicalities.

Uplifting us all, however, was a growing realization that many of our educational "problems" are common, although the precise form of the "problem" may vary from one national system to another. The tension between education and training, between the general and the specific, between the transmission of abstracted culture and preparation for the demands of a technology-dominated, and constantly changing future, is to be found throughout Western Europe. The tension is, of course, found elsewhere, too. But it is masked in the more rigorously planned and controlled systems of Eastern Europe, where both education and training are geared with precision to the perceived manpower needs of the economy (whether or not they are rightly perceived).

It is masked, too, in the American system, designed, like the rest of the free world, to respond only to the obvious forces of the market. It is most obvious in those liberal democracies where it is held that society must simultaneously trans-

mission the values it holds dear, and be seen to exercise liberally made little effort to learn from each other's attempts to ameliorate it—least of all in respect of the part that education and training can play.

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TEC in 'credit transfer' talks

The Technician Education Council, which was set up four years ago to unify the proliferation of technical courses and qualifications, is being taken to task by the Education Minister, Mr Gordon Oakes, yesterday to discuss credit transfer arrangements in higher education.

The Council for National Academic Awards and the Open University last week announced a scheme which would permit students to transfer credits between each other's courses. The two institutions, together with the Committee of Directors of Polytechnics and the Committee of Vice-Chancellors and Principals, were represented at yesterday's meeting.

By 1981, about 300,000 students will be on TEC courses, Mr Francis Hanrott, the council's chief officer, said at a press conference last week. The council would be making a case for transfer, not merely at higher education, but degree level.

The first 300 courses validated by the council were started last

autumn. A further 1,200 involved up to 40,000 students will begin in September. Most of the courses so far are in engineering, but a "small start" has been made in the sciences, said Mr Frank Ridgeon, deputy chief officer.

The courses lead to certificates or higher certificates or a diploma or higher diploma. It means a structure of the ordinary and higher national certificates and diplomas and City and Guilds qualifications," he said.

How far the validating courses should be designed to meet the full council met on Wednesday. This follows rejection by the Government of suggestions made in the Gann report in 1974 that a design vocational council be set up.

The council has also been consulted by the Government about the validation of agricultural courses, but Mr Hanrott said there had been no development in this area. The DES was still happy to make with the farming institutions.

PERSONAL COLUMN

Gerry Fowler Continental drift

Two weeks ago I was the only British representative at a small colloquium in Paris. Most of the dozen people present were distinguished educationists or ex-government ministers. We met to discuss possibilities for European cooperation in education, and how the curriculum could be designed to include both the transmission of the common culture and vocational training—each viewed from a European rather than a narrowly nationalistic perspective.

TES special offer

Bay of Naples holiday

There has been a big response to the TES special autumn Bay of Naples/Pompeii holiday offer, details of which were given in the TES 6th June.

This is a week's holiday (October 23 to October 30) which coincides with half-term in many places—at an inclusive cost of £119.

Readers have pointed out that in some parts of the country, half-term dates have been altered as a result of the Jubilee holiday, so we have decided to arrange a second departure on October 30 (October 31 to November 6). This will be subject to a minimum of applications, but given the response of the first offer we are confident of success.

The content of the tour is identical to our first offer and consists of:

- Direct flights London Heathrow-Rome and return.
- Coach transfers Rome-Massabiense and return.
- Seven nights' half board in the Hotel Maria.
- A full day excursion to Pompeii and a half-day excursion to Herculaneum.
- Services of an experienced courier throughout.
- Inclusive cost—£119.

Details from: TES Holiday Offer, Care of Page and Moy Limited, 136-138 London Road, Leicester LE2 1EV.



Extracts from the Green Paper

Foreword

Proposals and recommendations

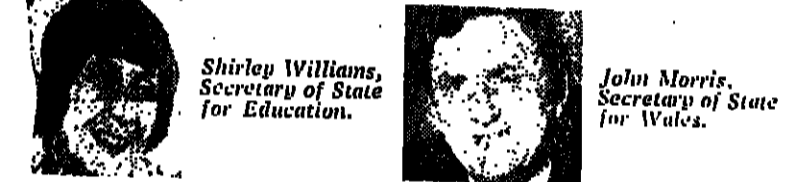
Education in the last decade has undergone great changes. The pace and depth of these changes are remarkable. Twelve years ago, the Labour Government issued its first circular on comprehensive reorganization, an objective which is largely but not yet wholly achieved, and which the Government is determined to complete. Already in three quarters of our schools the selective system is a thing of the past.

The content, as well as the structure, of education has changed. There has been a wide range of new demands on the curriculum, the introduction of new methods of teaching, and the gradual acceptance of a new examination, the Certificate of Secondary Education. These changes have brought with them a good deal of controversy; controversy over what has been achieved, over standards, and over the aims education ought to have.

The period of change coincided with a rapid expansion of the number of children in the schools, and of the number of young people in higher and further education. This in turn created a demand for many more teachers. Not surprisingly, the turnover of teachers and the proportion of teachers with only a year or so of teaching experience have been very high. These factors—the speed with which new demands and new methods have been put considerable strain on the schools. There are some areas of weakness in education and some unmet needs. This paper sets out proposals for dealing with them.

None of this should mask the remarkable work being undertaken in many of our schools. It is the vigour, imagination and talent of the teachers in them that impress the visitor: schools that open their facilities and their resources for learning to the entire local community; schools that emphasize creativity in design, in making things as well as learning things; schools that tackle with sustained enthusiasm the problems of children from other cultures or speaking other languages and make a microcosm of a happy and co-operative world.

We hope, therefore, that those who read this Green Paper and note its recommendations will do so against this background of work that is exciting and even outstanding.



Background

In his speech at Ruskin College, Oxford, on 18 October, 1976, the Prime Minister called for a public debate on education. The speech was made against a background of strongly critical comment in the press and elsewhere on education and educational standards.

Some of these criticisms are fair. A small minority of schools has simply failed to provide an adequate education by modern standards. More frequently, schools have been over-ambitious, introducing modern languages without sufficient staff to teach them, or embarking on a range of new methods of teaching mathematics without making sure the teachers understood what they were teaching, or whether it was appropriate to the pupils' capacities or the needs of their future employers.

Other criticisms are misplaced. It is simply untrue that there has been a general decline in educational standards.

Undoubtedly many parents complain that the Government is doing more than parents should be doing for their children, and that the schools, and should be consulted more widely. With this in mind, a committee of inquiry was set up in January 1975 to review the arrangements for the management of primary and secondary schools, and to recommend ways in which the Secretary of State could best secure a widespread discussion of its role.

The committee's report is published in this paper.

(i) to help children develop lively, inquiring minds; giving them the ability to question and to argue rationally, and to apply themselves to tasks;

(ii) to instil respect for moral values, for other people and for oneself, and tolerance of other races, religions, and ways of life;

(iii) to help children understand the world in which we live, and the interdependence of nations;

(iv) to help children to use language effectively and imaginatively in reading, writing and speaking;

(v) to help children to appreciate how the nation earns and maintains its standard of living and properly to esteem the essential role of industry and commerce in this process;

(vi) to provide a basis of mathematical, scientific and technical knowledge, enabling boys and girls to learn the essential skills needed in a fast-changing world; and to help to teach children about human achievement and aspirations in the arts and sciences, in religion, and in the search for a more just social order;

(vii) to encourage and foster the development of the children whose social or environmental disadvantages cripple their capacity to learn, if necessary by making additional resources available to them.

The translation of these aims into classroom practice will depend upon the characteristics of individual schools and the localities they serve.

The education system in England and Wales depends on a partnership between the education departments, the local education authorities and the teachers. It is an essential ingredient of this partnership that schools should be accountable for their performance: accountable to the local education authority—and those who select it—as part of the public system of education; accountable through the school governors and managers to the local community that they serve.

The Secretary of State considers that each local education authority should establish advisory machinery to develop programmes of in-service education and training for teachers. She will herself put forward any proposals for regional or national level organization of courses when the working group on the management of higher education has reported.

In the longer term, in-service training is an activity which might be undertaken appropriate for specific groups. If the scope of such grants were to be widened, after consultation with ACSST, the Government is instituting a 10 per cent sample survey this autumn of secondary school teachers, which will indicate among other things how their time is divided between teaching and other duties.

The Secretary of State believes that senior and experienced teachers should devote as much time as possible to teaching.

Local education authorities should develop more systematic approaches to the recruitment, career development, training and deployment of their teachers; and should consider whether their present arrangements are such as to secure the best appointments to headships.

Regulations now in preparation under the Superannuation Act 1972 are intended to facilitate the early retirement of teachers aged 50 or over on redundancy, of whom this would be in the interests of the education service. Other aspects of teachers' conditions of service may need to be reviewed in order to promote the more flexible and effective deployment of teachers in the interests of the schools and their pupils; the impact of falling school rolls will add weight to the study of these problems.

SCHOOL AND WORKING LIFE

Local education authorities, schools and industry must work more closely together. Consideration should be given to the appointment of people with experience in management and trades unions as governors of schools. Schools and firms should establish links at local level. Industry, the trades unions and commerce should be involved in curriculum planning processes.

Full use should be made of the contribution industry and the trades unions can make to careers education and improved understanding of productive industry. Work experience and work observation, properly related to school programmes, have a valuable part to play.

Where appropriate pupils should have the opportunity of taking part in linked courses. All school pupils should have the opportunity to visit the local further education college, and should be given information before leaving school about courses available there.

Schools may need to adjust their priorities to make room in the curriculum for careers education for all pupils from not later than the age of 13.

SCHOOLS AND THE COMMUNITY

Parents, industry and commerce should be aware of what the education system is trying to achieve. A circular will be published later this year setting out the information that should be available to all parents about schools.

Results in isolation can be seriously misleading.

Tests suitable for the monitoring of pupils' performance on a broader basis by local education authorities are likely to come out of the work of the Assessment of Performance Unit (APU). Here again there will be advantage in greater consistency. The APU is concentrating at present on the development of tests suitable for national monitoring in English language, mathematics and science. It will embark on a programme of national assessment of the school system in 1978.

Local experiments in the provision of leaving certificates for pupils will be kept under review. The Secretaries of State will consider the possibility of commissioning a national study.

Secretaries of State are studying the various proposals for changes in the examinations normally taken at 16-plus. The Secretaries of State will discuss with the Schools Council the possibility of carrying out exploratory work on a "grouped" certificate, in which the current programme. There is no intention of abandoning single-subject examining.

The Secretaries of State reject the idea that rigid and uniform national tests should be applied to all children at certain ages.

TRANSITION BETWEEN SCHOOLS

Substantial problems can occur at the point of transition between primary and secondary schools and when families move from one area to another. The difficulties can be reduced by regular contacts between the teachers concerned: (a) coordination of primary and secondary school curricula and of assessment procedures; (b) good record-keeping practices. This whole area needs the urgent attention of local education authorities.

TEACHERS

It is upon the supply of good teachers in adequate numbers that the strength of the education system must rest. There is no hope of implementing successfully the proposals in this paper without the full understanding and support of the teaching profession. The key to the interests of the schools and their pupils; the impact of falling school rolls will add weight to the study of these problems.

It remains the intention of the Secretaries of State to secure further improvements in school staffing conditions as soon as economic conditions allow.

The aim of the Secretary of State is that there should be as soon as possible a graduate-entry into the teaching profession; the existing certificate courses should be phased out and replaced by a minimum entrance qualification for BEd courses should be 2 A-levels. Entrants to such courses should also have qualifications at a minimum of GCE O level grade C or CSE grade 1 in English and mathematics or should otherwise satisfy the institution concerned and its validating body of the quality of the education they should be given to applicants for teacher education courses who have had some employment outside the world of education. She has particular regard to the needs of students and those who belong to the ethnic minorities.

The Secretary of State considers that more attention should be given in initial teacher training to the national importance of industry and commerce, to helping them in their responsibility for conveying this to their pupils, to the need for children to be taught about participating in a democratic society, and to preparing for teaching in a multicultural society.

To reinforce the professional aspects of teacher education, the Secretary of State: (a) would like to see many more exchanges of teachers between schools and colleges; (b) proposes to foster the growth of a network of centres of scholarship and professional exper-

scholarship and professional expertise within the reorganized teacher training system.



The Green Paper

Thus a centre might be subject-oriented, or it might specialize in development work for particular age ranges of children, as certain colleges already do; other centres might take the lead in recognized problem areas such as remedial education, or the teaching of the mentally handicapped.

a passport to a teaching career, should await the satisfactory completion of probation. The teacher's permanent appointment might also be deferred until that time, his probationary service being undertaken on a separate contract reflecting his interim status and lightened responsibilities.

IN-SERVICE TRAINING The Government's expenditure plans envisage increasing financial provision for in-service training. The expenditure plans, which are of course, subject to annual review, assume that the number of teachers released for in-service education and induction training will rise from 4,500 in 1977 to 18,500 in 1983.

Local education authorities will have the major responsibility for developing programmes of in-service education and training. The Government believes that each authority should establish advisory bodies of teachers and trainers.

Provision of longer, more advanced and more specialist courses will need to be organized at sub-regional or regional and sometimes national level. The Government expects that their earlier proposals for regional committees were not acceptable and will put forward fresh proposals on this matter when the working group on the management of higher education reports next autumn.

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Science diary

by John Maddox

In the early hours of the morning, and the greatest concentrations in the late afternoon or evening. The fluctuations of the concentration of nitrogen dioxide were only small, differing from the average by 10 per cent, but the pattern of the variation seems real enough.

The pattern is also telling. It resembles that of the diurnal variation of the concentration of gases such as sulphur dioxide, but differs markedly from that of the radioactive gas radon, which tends to reach a maximum in the early hours.

The explanation is tied up with the behaviour of the lowest layers of the lower atmosphere on summer nights after the sun goes down. A temperature inversion is usually formed and the layer of atmosphere beneath does not mix with that above the inversion until the sun has been able to restore the normal steady decrease of temperature with height.

By the same test, however, sober people should not at this stage go around wringing their hands for fear that the ozone layer is about to be seriously depleted. What is needed instead is a serious programme of research, intended to discover more about the ground-level ozone which is naturally formed and then to understand more than just the bare bones of how pollutants might cause trouble.

Fortunately, the scare of the past few years has stimulated precisely such an investigation. In all the circumstances, it is more than a little alarming that, in the United States, the regulatory agencies are already well along the road to banning what they are pleased to call a non-essential use of the chlorofluorocarbons.

The Secretary of State proposes to discuss with the teachers' and other interested organizations how this gap might best be filled.



The Secretary of State considers that the time is ripe to devise more comprehensive arrangements for supporting teachers in their initial period of service on entering the profession, and for assessing their progress during that period.

It should be possible for the workload and level of responsibility which new teachers undertake during this period of apprenticeship to be reduced and more closely defined, and there

Nowhere is this partnership more necessary than in the training of teachers. The difficulty of the task is to ensure that the relevant information is available to the teachers and that they are able to use it effectively.

Local education authorities will need to be organized at sub-regional or regional and sometimes national level. The Government expects that their earlier proposals for regional committees were not acceptable and will put forward fresh proposals on this matter when the working group on the management of higher education reports next autumn.

The people at Harwell concerned with the measurements are K. A. Brice, A. J. Eggleston and S. A. Penkett. What they did was to use a sensitive mass-spectrometer to obtain what is for all practical purposes a continuous record of the concentration of nitrogen oxide in the atmosphere near ground level.

Briefly, the smallest concentrations of nitrogen oxide were found at the lowest levels of the atmosphere, and these were found to be highly variable in time and space.

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The Secretary of State also envisages that designated experienced members of staff should be given special responsibility for overseeing their work and progress.

Re-training as distinct from initial and from normal in-service training, may be necessary, for example to enable teachers with suitable potential to fill vacancies in shortage-subject areas. It should include the need for specialist teachers in the physical sciences, mathematics, craft, design and technology, which are particularly relevant to the country's industrial needs and where there have been persistent shortages of adequately qualified teachers for many years.

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SPECIAL ANNOUNCEMENTS

WESTHILL COLLEGE, BIRMINGHAM CONFERENCE ON CAREERS IN EDUCATION An initial announcement for all who are concerned with Careers in general and Careers in Education in particular. An important one-day conference has been organized at Westhill College, Birmingham, on September 19, 1977. It is hoped that the whole climate of teacher supply and demand may be questioned and discussed.

School and working life

The Prime Minister's concern about the relevance of present-day education to the needs of industry and commerce was reflected in many of the comments at the regional conferences. But there were many equally strongly expressed criticisms directed at industry: for instance that employers often lay down unrealistic standards of attainment for school leavers well beyond what the job requires; that they have not made allowances for the fact that they are selecting from a group of school leavers which is more highly screened by higher and further education. And overlooking these specific comments was the frequently expressed view that if certain occupations are perceived by young people as unattractive, it is undesirable to expect teachers alone to remove the antipathy, and that a Manifesto there is a lack of understanding and communication. But the picture is not altogether gloomy; there was encouraging evidence at the regional conferences that some educational authorities were already pioneering attractive schemes, including opportunities

Milford High break tennis grip

Milford School's double grip on the two schools team tennis championships has at least for the moment, been broken. After winning both the Aberdare Cup for girls and the Glanvill Cup for boys in each of the past four years, it is to settle for just the boys' prize in this year's tournament at Queen's Club, London.

Boost for football

The English Schools' Football Association is to run a new annual competition for senior boys next season. This is the outcome of a sponsorship deal with Barralan-Leicester, makers of football kit. The ESFA has always been extraordinarily cautious about sponsorship, and some years ago issued a policy statement attaching a list of conditions to sponsorship. Mr. G. G. Evans, secretary of the Association, declined to give the value of the new sponsorship, which runs for three years of cooperation between manufacturer and schools, and which will run for five years.

Plant Hill High School water polo finals

Plant Hill High School, Manchester, and Bedford Modern School have managed to get two teams into the final stages of the first ever national schools water polo championship. In the regional finals each school won both under 16 and under 19 competitions and join four other schools to contest semi-finals and finals at Sharnston Pool, Manchester, on November 12. Brooks Bank School, Eland, Halifax and the City School, London, are the other two under-16 teams with Royal Grammar School, Newcastle, and Whitgift School, Croydon, Surrey, completing the under-19 representation.

Science diary

By John Maddox

Schools and the community

By John Maddox

Aerosol howl sinks to bleat

By John Maddox

COURSES

By John Maddox

DIPLOMA IN CAREERS EDUCATION AND GUIDANCE

By John Maddox

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BINGLEY COLLEGE

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Nowhere to play?

Wendy Higgins describes the National Playing Fields Association's part in solving this inner city problem

Play is vital to a child's development. Few people would argue with this. But enough thought is still not given to providing play space and play facilities. Housing estates can be planned and built with only the barest minimum of space allocated for children's play. Children often have to make do with space left over after planning. It is probably in the most inconvenient place on the estate, land that no-one else wants, that no-one else can use.

It is not only on new estates that children are likely to be denied adequate provision for play. The problem exists everywhere, in the decaying inner city areas and in the heart of the country, where open space abounds.

Holiday play schemes are one way of alleviating the problem. They provide a short term solution and go some way to relieving the boredom, frustration, loneliness and isolation that many children experience during the school holidays.

In some areas where successful holiday play schemes have been run, it has been possible to establish permanent playgrounds. This should be the aim for most holiday play schemes. If there is a need for a temporary play scheme, there is usually the need for a permanent one.

The National Playing Fields Association compiles annually a register of holiday play schemes and judging by the returns received this year from local authorities, there has been a considerable cutback in the number of schemes being run. This is particularly sad because the

Rural associations

Sally Festing has compiled a list of organizations arranging activities in the countryside

National Conservation Corps activity conserves Britain's countryside. Weekend tasks, residential and daily are run from regional centres throughout the country. Local centres welcome helping hands. List available from 110 and South East Region's Zoological Gardens, Regent's Park, (16 years and over).

National Trust, greatest conserve-

Summer at the National Portrait Gallery

Angela Cox and Eileen R. Hooper-Greenhill

The National Portrait Gallery has established a consistent pattern and standard in its educational activities since the inception of the education department in 1970. The steady bulk of the work is with classes of school children during term time, brought by their teachers for purposes closely related to their work in the classroom. Groups vary from very young primary school children coming to see portraits of personalities they know from their project work, to academic sixth form groups doing intensive studies at pre-university level.



Many children recognize instinctively that the portraits in the gallery have been created for and maintained by class interests very different from their own, but they are intrigued by the value of the paintings as historical documents or archaeological records. As the policy of collecting portraits is determined by the reputation of the sitter, rather than by the quality of the painting as a work of art, many of our pictures fall outside the category of fine art. Thus the mystique that often clouds the understanding of paintings within the fine art tradition is minimal.

The portraits are explained in such a way as to give due credit to the creative imagination of the painter, where appropriate, but also to locate the paintings firmly within their social and historical context.

An example of this treatment is the popular school project of Samuel Pepys. The starting-point is the well-known portrait of Pepys by John Hales, for which the sittings are colourfully described in *Diary*. The children study the portrait of Pepys's famous contemporaries with extracts from the *Diary* that help to bring these personalities to life.

As an extension of their experience in the gallery, the children follow a history walk that covers the streets and buildings associated with Pepys—his house in Buckingham Street, the York Watergate

Holiday drama projects

Peter Fanning looks at two lively alternatives to seaside theatre

The summer shows are on their way, come rain or sun or Polar icecap. Gleming Petruska, stuffed with new sawdust, Pierrot in clean tan and fine darned smock; pop-ops and lollipop, deckchairs and umbrellas between the trees—and the glowing lights of Blackpool Tower, blithely like big brother in the gloaming.

But sitting and watching is only half the story. Many summer shows involve doing as well. And so in the classroom, so in the playground. Involvement means more than yapping "E's behind yer!" through a mouthful of crisps. One play scheme which attempts to go the whole hog and involve children from five to 11 is the Magic Circus, which is based on Sevenoaks as part of the Sevenoaks Play scheme.

Magic Circus is a kind of Pied Piper for the outlying villages in that part of Kent and last year spent every summer afternoon were spent away from under Mum's feet and equally out of harm's way. Each season is based on the village of the journey's end. Pierrot appears to round off festivities with another short play and the troupe moves on.

One afternoon out of six weeks perhaps, but by spreading their presence so thin, the group entertains and involves 700 children during the course of the whole holiday. The children who because they live some way out of town are generally the most deprived of such dramatic fun.

This year's Magic Circus enterprise involves "two villages who try to raise money by setting up a carnival-type entertainment". All hopes are for another success—except that the boys of rising costs is threatening to throw a heavy spanner in the works. Who will



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United States

Balancing the books will hurt sacred cows

from Thomas Cahill

NEW YORK The elaborate American battle between President and Congress by which major legislation is finally enacted has undergone considerable re-choreographing because of President Carter's announced intention of balancing the Federal Budget within five years.

This seemingly impossible objective has led Mr Carter to cast a cold eye on many of his own party's favourite programmes—the so-called "pork barrel" of Federal funds that, judiciously bestowed on their various constituencies, helps to keep the Congressmen in office.

Mr Carter's unimpeachable rationality in designating certain programmes for the axe has raised Congressional tempers to a high pitch, with cries of "disloyalty" to party and "nakedness" being among the few printable ejaculations.

Mr Carter, however, is learning to compromise—something he perhaps had in mind to do all along—and the largely Democratic Congress is learning to think of some of its most sacred cows as expendable items.

Recently, the President, who had been threatening to veto a \$16.3 billion Appropriations Bill for the funding of the Federal Departments of Health, Education and Welfare (HEW) and of Labor,

West Germany

Concern over growing study demand

by David Dungworth

The 15 Social Democrat members of the Bundestag who are responsible for formulating and coordinating the party's national education policy have taken the unusual step of issuing a joint declaration on the problems caused by the record numbers of school leavers currently seeking study and training places.

They detect growing feelings of resentment and apathy among young people as the competition for higher and vocational education intensifies.

Counter-measures are urgently required since the school population will not reach its peak until 1980 and the number of university students is likely to continue to increase until 1985.

Fifteen years ago only 6 per cent of teenagers were able to fulfil the requirements for university entrance; this year the proportion is 22 per cent. A third of those qualifying nowadays do so not via the grammar school route but through courses of comparable standard provided by technical and further education colleges.

These developments have been welcomed by all political parties but it is only recently that their consequences have been appreciated. The job market is unable to expand at a comparable rate and as higher education has in the past been a virtual guarantee of well-paid employment, today's young people feel themselves cheated of the opportunities enjoyed by those who completed their education before 1970.

The immediate need is to secure an adequate supply of college and training places so that school leavers can first obtain the basic qualifications for their future profession. Universities should therefore introduce the temporary "overloading quota" to which they agreed last year and if necessary the Federal Government should enforce the industrial training levy to encourage employers to provide more apprenticeships.

In the long term the SPD politicians call for a fundamental change in the way the country as a whole to ensure greater equality of opportunity. They suggest a number of ways in which progress towards this ideal can be achieved.

Comprehensive schools should eventually replace the tripartite system in all Länder. This compromise involves must, however, be properly staffed and financed and not be forced to compete on unfair terms with other types of school.

In vocational education better coordination is needed between the regulations governing apprenticeship training in the Länder, the Federal Republic and the outline syllabuses for vocational schools drawn up by the individual Länder.

The Federal and Länder governments should make available a sum of DM2,300m (about £575m) in change to create a voluntary training year for all school leavers who are unable to find jobs or training places.

Universities should increase their student intakes not only by making maximum use of their present resources but also by rationalising the content and reducing the length of degree courses and by a willingness on the part of staff to spend more of their time on teaching and less on research. A systematic reform of the Federal Educational Grants Law should be carried out to benefit students and their parents in the lower income groups.

Italy

Private schools may move for state aid

from Dalbert Hallenstein

MILAN A Vatican document on the international role of Catholic education just published in Rome has been interpreted by many Italian educationists and politicians as the beginning of a campaign to obtain State finance for Italian Church-run schools.

The 34-page document, prepared by the Catholic Education Congress and entitled *The Catholic School*, speaks about the present "unfortunate" tendency towards a "class structure" in Catholic education in those countries which still do not subsidize religious schools.

The document complains that the children of the less well-off are often excluded from a Catholic education because "in some nations the Catholic schools, because of the economic and judicial situation in which they must work, are forced to educate mainly the children of the well off."

The Italian Constitution forbids State finance to private schools and therefore the document has been widely interpreted here as an appeal for help.

The timing of the release of the document has also been interpreted as significant in Italian political terms. At this moment a reform of Church/State relations is under way. The Christian Democratic Government has pledged to reforming the 1929 Mussolini/Vatican Concordat which still regulates Church/State relations in Italy.

Among the issues which are now being discussed is the role of the Church and religious education in Italy's State education system (TES, March 18).

The publication of the document also comes soon after the Italian Communist Party has rejected a

wide-ranging programme agreement with the governing Christian Democrats. In its increasingly successful attempt to bring about a "historic compromise" with the Christian Democrats by openly participating in Government policy-making, the Communist Party wants to avoid any possibility of a head-on confrontation with the Catholic Church.

Significantly, while the other party was highly critical of the Vatican document, the Communist Party said it had "interesting aspects".

At present there are about 14,000 Church-run schools in Italy, of these 10,000 are nursery schools, 2,300 are elementary schools and 1,600 are middle and secondary schools. The total number of pupils enrolled at Church-run schools in 1976/7 is estimated at about 10 per cent of the school population.

While the percentage has dropped in the past 20 years (composition from the expanding state sector and difficulty in finding qualified staff is said to account for this), a secondary school level there has been a considerable increase in enrolments in the past decade, in 20 years the number of pupils in Catholic upper secondary schools has doubled, and the number of actual schools has increased by 4 per cent.

The chaos and inefficiency of Italy's state secondary schools is probably the main reason for its expansion. A growing number of parents (many of them non-religious) are now willing to pay for an education which guarantees their children a study environment in which they have characterized the life of many state secondary schools over the past 10 years.

Unfair deal for those who went down the mines

PARIS There must be many teachers who were conscripted into the mines after August 1943, or who volunteered for service there in response to the national appeal. To those men, clear undertakings were given that they would be treated in the same way as if they had entered the forces. The promises were honoured in such matters as demobilization and postwar grants but recently, the 1974 concessions for superannuation (allowing some war time service to be bought in at reduced rates) have been applied to those in the forces but not to those in the Bevin schools.

This injustice was the subject of a Parliamentary debate on June 16 (*Parliament* vol 933 no 120) when Mr de Rothschild eloquently put the case. The Minister did not deny that promises had been made but had not been honoured. She maintained, however, that if the pension concession was extended there would be others who would have an equally strong case for inclusion. In other words, the Minister said Government has to be broken.

May I ask your readers who are affected by the superannuation legislation in respect of service in the mines to write to Mr Rathbone at the following address:

P. O. BEALE,
10 Cornfield Road,
Beaconsfield, East Sussex.

Boost for independent staff

from Joan Smyth

PARIS More than 100,000 teachers in France's private schools stand to gain most from the new Government subsidies voted last month aimed at bolstering the French private school system.

It took the French National Assembly an all-night session to finally pass the Bill by 292 votes against 194. And as *Le Monde* pointed out: "Whatever the results of the elections next March it would be hard to imagine any Government seeking to overthrow the new rights finally granted to private school teachers."

Training charges for private school teachers, most of whom train in Catholic colleges, will now be the responsibility of the state. For teachers in the private sector, tenure of service and retiring pay will be brought into line with those of state teachers. And retiring pay will be left entirely in the hands of individual schools without the state administration having a right of veto. (In state schools the head is sent a typewritten list of the beginning of the school year and he or she has been assigned.)

The new Bill also covers special grants to enable private schools to get up technical workshops and laboratories required under the new Haby reforms.

Spending lags 'far behind' European average

from Mario Modiano

ATHENS The Greek Opposition has been arguing that the share of the Gross Domestic Product that goes to education must be doubled if Greece is to catch up with the average in the rest of Europe.

But Mr George Rallis, the Minister of Education, says that the ratio of 6.8 per cent of the GDP to national defence and 3.8 per cent to education is adequate.

The controversy was touched off by a seminar on education organized by the Democratic Centre Union, the main Opposition party; its central conclusion was that the nation could afford and should double state investments for education.

Mr Rallis disagrees: "In 1975 (the last year for which there are definitive national accounts), the State spent 17,700 million drachmas (€285m) on education. That is 2.63 per cent of the GDP or 12.5 per cent of total government spending.

"Private education spending was 8,300 million drachmas or 1.23 per cent of the GDP—making a total of 3.86 per cent of the GDP.

"It is not possible, we want to increase credits for education, but I believe

Pop's place in the classroom

Edinburgh George Fitzgerald's suggestion that "pop music" is given a "distinct thumbs down" in the face of growing evidence which shows that, on the contrary, pop music is indeed being "brought into the classroom," as he suggests it should be, is curious. Its use is by no means restricted to school concerts.

It is true that little has been written on this subject, and until last year Keith Swanwick's book *Popular music and the teacher* (Penguin 1968) was the only book available for the teacher interested in developing this area of work.

What the synod said about RE

London's amendment to it. The motion called on each diocese to take steps to provide for lifelong Christian nurture from within its own resources. This was the call for an end to compulsory religious education in schools.

The first motion, passed by the synod, concerned the monitoring of developing curriculum patterns. The second motion, also passed, urged the Secretary of State to initiate an inquiry into the provision of religious education in maintained schools, with special reference to the place of Christianity within the curriculum.

The fourth motion, approved, accepted responsibility for joining with other churches in developing a strategy for mission and ministry in further education.

It was the third motion which has given rise to your inaccurate report, and it was this motion which was not accepted by the synod, though neither was the Bishop of

There are good parents too...

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'To' bad

Edinburgh While many will agree with the substance of M. G. Holding's argument (July 8) that a simplification of English spelling would benefit both teacher and student, his choice of the word "to" illustrates the different spellings of homophones was unfortunate.

There are, of course, no homophones involving "to," "too" or "two" certainly, but both are quite distinct in sound (and stress) from "to" except in the mouth of a non-native speaker.

Mr Holding suggests, however, that the DES in its haste to introduce the spelling reform, let the homophones "to" and "two" be confused as the highly stressed words. We would thereby accept the spelling of the two compounds in which the DES may be supposed to be chiefly interested—"to" and "two" as "to" and "two" respectively. "to" and "two" are not homophones.

R. J. SPENSLEY,
Prescott College of FE.

Mornings only?

Edinburgh I feel that Mr Robertson misses the point. (Letters, June 20) The Minister's ob, done properly, inevitably involves long hours of work outside the classroom.

Therefore, I heartily support Mr Edington's proposal in his letter to introduce 8 am to 2 pm schooling. Having seen this country's education in Germany, I can confirm that teaching standards are improved and pupils can complete their homework and still enjoy some fresh air.

Of course, as far as teachers are concerned, it is not only the free afternoon which gives them "marketing time" but also the fact that

Free expression

Edinburgh One of the things I like best about this country of ours is our freedom and right to express ourselves both out loud and in print. Which is why the Tyndale Defence Committee are able to put their advert in your paper.

Fair's fair, though. Teachers aren't sacrosanct. What about a defence committee for the children whose parents have been harmed?

JUNE WEBB,
58 Queen's Gardens, Rainham, Essex.

LETTERS

School to work: only cash can count

Sir.—A great deal has been written in recent months about the problem of youth unemployment. There is now general recognition that this is not only one of the major issues of the day but that it is one which is likely to remain with us for some time to come.

It is hardly surprising, therefore, that the proposals of the Manpower Services Commission's Holland working party have received such widespread approval; and that the government have acted with such commendable speed in adopting them for implementation.

While in no way wishing to denigrate the short term, ad hoc schemes of the past 18 months, their main objective would appear to have been to provide young people, at almost any cost, with some alternative to idleness. The Holland proposals on the other hand, represent an imaginative attempt to rationalize these developments into a constructive and coherent range of progressive training and work experience opportunities; and to do so on a large enough scale and on a sufficiently long-term footing to make a significant impact.

Particularly welcome is the emphasis given to improving the counselling, further education and training elements in the programme and the moves towards more local, unified operational units in an attempt to ensure that the schemes provided do in fact meet the needs of those unemployed. It is these two points in particular on which I should like to comment.

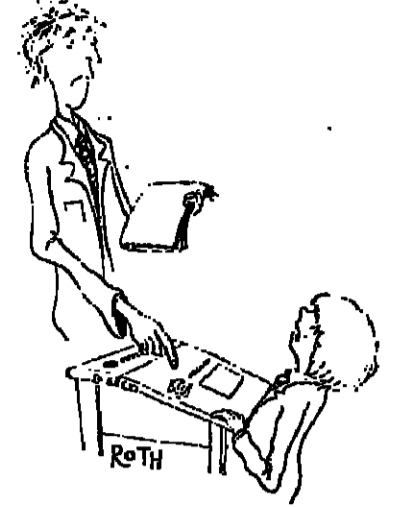
The education service is anxious and willing to respond to this chal-

enge but in the present financial situation its capacity to do so on the scale envisaged without a substantial injection of additional resources may well have been overestimated. Certainly the amounts so far announced by the Secretaries of State for Employment and Education hardly seem sufficient to meet the need.

In Somerset, for instance, it is already clear that we shall have the greatest difficulty in meeting the demand for normal further education courses this coming autumn, let alone be in a position to contemplate any further expansion. Yet further blurring of what constitutes normal further education provision and those training courses falling under MSC sponsorship may present us with difficulties and funding anomalies.

The payment of a flat-rate allowance for young people participating in all Holland schemes is a desirable development in itself but it could constitute a considerable disincentive to some students to continue their full-time education beyond 16 even where it is clearly in their interests to do so. It is encouraging to know that Mrs Williams has this point very much in mind and is currently considering how best to overcome it.

The recognition of the crucial role of the local authority careers service in the effective implementation of the proposals is also greatly to be welcomed. However, the resources of the service are currently stretched to the limit and it is unrealistic to expect it to undertake the kind of role which Holland envisages without a substantial strengthening. The initial strength-



"Oh that I had" for the multiple choice questions.

Oxbridge odds swing against state pupils

Sir.—In the days of mixed ability teaching, integrated studies, faculty systems and community education it is not surprising that, in some quarters, little or no time is devoted to the special needs of the bright, as opposed to the brilliant, students in the state system. I should, therefore, like to voice my concern at a trend which, if allowed to continue, will seriously inhibit the aspirations of some of these pupils.

Until about 10 years or so ago, the Oxbridge entrance system was heavily weighted (disgracefully so in my opinion) towards pupils at independent schools. Unless a pupil in the state system was really gifted, he had little chance even against the average boy in the independent sector. One reason, among others, was the standard of the examination papers which was geared to the seventh-term candidate.

To be fair, I know that many college admission tutors were very concerned at the imbalance of their intakes and the introduction of special questions for fourth-term candidates (i.e. pupils from schools which could not provide a third-year sixth) illustrated this dilemma very clearly. At last the state candidates had a chance to compete for entrance (not awards) on more equitable terms and there was an increase in the flow of good candidates to Oxbridge.

However, it does not seem there is a growing trend for the independent school to admit candidates in the fourth term of A level studies. This may be due to pressure from parents who are not prepared to pay fees for longer than is necessary or it may just be that these schools, with two bites at the cherry, have realised that there is no doubt that if these schools employ their considerable resources on fourth-term students, the state candidate will be at a distinct disadvantage since I cannot imagine any head teacher having staff to cater for extra teaching. Consequently Oxbridge will once again become the preserve of the independent sector. Since there is no way that any examiner can make allowances for the non-coached candidate.

I am not calling for special treatment for pupils from schools like mine. I just want them to compete on equal terms. Since I would not want to see the special Oxbridge papers abolished, I cannot think of a solution to this problem. Can any admissions tutor suggest one or am I being too pessimistic?

R. J. ENGLISH,
Botolph Claydon School,
Warrington.

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Death to the villages?



Have village schools a future? What effect does their closure have on the rest of village life? Francis Beckett looks at some attempts by teachers and parents in Norfolk to save their threatened schools

The Jubilee party in the small village of Gissing, Norfolk, was not a joyous occasion. The party was held in the village hall where the village 'tee' all meet—the doomed village school. The school will not reopen in September, and the village does not know whether it can keep the building. "It may have been the last time the village was together", said one sadly.

Norfolk's farming villages are the latest, and least likely battlegrounds over cuts in education spending. The council admits to likely closure for up to 50 of them; local campaigners claim the axe hangs menacingly over 200 schools, and that by the mid-1980s, 7,000 children between five and 11 will be bussed to schools several miles away.

Some schools have been saved. At Aldeby the scheme to close the school and

bus the children to Wheatacre was scrapped—in favour of a scheme to do precisely the opposite. One Aldeby parent summed up the mood of the village—and, increasingly, the mood of the county: "Toll the Wheatacre people we shall continue to fight with them." They did, and the council is thinking again.

Gissing was a fairly typical village school. It had two teachers and 28 children aged between five and 11, working in an ugly, but solid and comfortable, Victorian building.

Nearly every one of the 200 inhabitants signed a petition, to Shirley Williams, to keep their school. South Norfolk District Council supported them—breaking the tradition not to oppose the county council in an educational matter. This district council's stand came about because of the presence of a lifelong socialist, who learned his politics and his educational concern from the most famous of all rebel establishments—the Burslem Strikers School.

Tom Potter was the youngest of the six Potter children who, when the two teachers in Burslem were dismissed for their help in organizing local farmworkers into a union, led the other children out on strike in 1914. They founded the Strikers School, where the two teachers, officially disowned and paid by the NUT, gave Tom all the education he ever had. The building is now a monument to labour history across the green from Tom Potter's vil-

lage store. The official school which replaced it is now to take Gissing's children.

The county council's arguments are an odd mixture of economics and educational theory. Small schools, it is argued, do not provide the range of facilities and mixtures of age and ability the children need. At the same time Gissing, compared with town schools, has a favourable teacher-pupil ratio. It is claimed that closing it will save £300 a year for each child.

But Gissing's children will be bussed to Burslem, where the school will have to press its children into a deal with the influx. Desperately trying to show that their school was viable, the parents pointed out that the school population had increased by five in the past three years.

Still, Shirley Williams approved the closure. If she had thought of helping the beleaguered school, the local authority might have quoted back at her the concluding words of her department's circular *Falling numbers and school closures*: "The general policy of the Secretary of State will be to approve proposals to cease to maintain under-used schools."

"But 'under-used' is an unusual expression. The DES and the county council claim that many schools are not attracting enough pupils." But Molly Stiles, the redundant teacher who chairs the Friends of the Village Schools, says this is a self-fulfilling prophecy.

She points to Shelton—now granted a

temporary reprieve—as an example. It has 53 children aged between five and 11. Neighbouring Aslacton has 70. The idea is that the eight-to-11-year-olds will be creamed off from both schools and sent to a nearby middle school. Once this has been done, Shelton will have to close. It will be uneconomically small.

But Aslacton, too, will be substantially diminished and permanently unsure of its future, and therefore not the most attractive proposition to parents and teachers. How long before Aslacton is officially regarded as a dying and unviable school?

On that reckoning Molly Stiles and her husband, head teacher at another village school, believe that 200 schools are in danger, not the officially admitted 50. Once the nine to 11 age-group goes to middle schools, any school with an annual intake is likely to find itself with fewer than the magical 30 pupils—and therefore a candidate for closure.

They are unlikely to go quietly. The Gissing campaign—probably the hardest-fought yet—taught parents certain lessons. Margaret Phillip, a leading Gissing campaigner, summed them up. "I really thought the Secretary of State might step in and stop it. We did everything legal. I'm not a militant person, and I thought we could do it in a reasonable and civilized way. The next village in line will have to do something else."

To start with, says Molly Stiles, "you have to watch your head teacher like a

Children in distress

John Petherbridge reports on what schools are doing to meet the needs of children of battered women



Leaving a violent home and going to live in a refuge for battered women is a traumatic experience for children, especially if they have witnessed acts of brutality against their mother. Since most women, living in the hundred odd refuges throughout the country, have children with them, a number of schools have had to face problems peculiar to this situation.

No single approach has been adopted. Activities for the children in refuges are organized differently, depending on the availability of resources and voluntary or paid childworkers. Although there are an estimated 2,000 children in refuges, there has been no national study of their needs. Discussion has been limited to workshops at National Women's Aid Federation conferences and meetings of childworkers from different refuges.

Lou, mother of six-year-old Ooki, went to the Wandsworth refuge three months ago. She explains how she and her daughter felt when she arrived: "For Ooki it was difficult because she didn't have her toys and other things around her, and she had to adjust to all the other people in the refuge. It was almost too much at first, we had to share a bedroom with a woman who had four robust sons, and we were both in a bit of a state of shock."

Sandra, another mother, described the effect on her two young children. "It made them unsettled, they saw I was under a lot of stress and they became insecure... only now after four months are they beginning to settle down at school. At first the crowding and the noise made it exciting for the children but conditions make it difficult to establish any routine."

Sandra's and Lou's children attend a local primary school, where the headmistress talked about the problem.

"We deliberately don't get in touch with their previous schools to obtain school records, so that the children's whereabouts can remain secret. We therefore have no prior record of their abilities. Here we are fortunate in having a 'nurture' group into which some children can go when they start school. This is for children, not just from the refuge, who would be lost in a larger class. The group has two adults for nine children. When the children are ready we filter them into normal classes. I believe this has been of particular value to the children from Wandsworth Women's Aid."

Barbara, a childworker at the Wandsworth refuge, says she thinks it is important that the children go to school as soon as possible after arriving at the refuge. She feels it gives them security and continuity, and that getting them involved with other children outside the refuge helps to relieve some of their anxieties.

So nationally, trade unions concerned include not only the National Union of Teachers—which believes that rural areas ought to be given some of the money allocated to educational priority areas—but also the National Union of Agricultural and Allied Workers, representing rural workers.

Both unions welcomed the disappearance of all-age schools—the old village schools which taught a few children from the age of five until they finished their schooling at 14. They are happy to see children over 11 travelling to schools which are better equipped to teach them.

But when it comes to primary schools, closing village schools looks like either a cost-cutting exercise at the expense of the children and the community, or a piece of social engineering which will rapidly depopulate the countryside.

"Gissing", says Tom Potter, "is a dying village. They're closing the rectory, closing the school, the church hall may go up for sale, they've turned down planning permission for six new houses."

The death of the village schools brings with it, say the people who live there, the death of the villages themselves.

had become much less violent. The head of Belmont primary school, which has taken pupils from the Chiswick refuge since it opened in 1972, was not sure about keeping the children off school.

"I think it's very important that you establish a structure for the children, as school does. I appreciate there is a problem of transience, that many mothers don't stay long at the refuge, but I think there is a danger of the children being over-indulged at the playschool. They need models from other children of their own age; you don't want the undisturbed child modelling itself on the disturbed child."

He estimated that about 80 per cent of children who came from the refuge needed remedial teaching, while at another primary school near by, the remedial teacher reckoned that 50 per cent of children from the Chiswick refuge required her help.

A Bromley headmistress, with children from the local refuge in her school, said she thought that most children were so distressed and disturbed, their learning was severely restricted by emotional problems. Some, she thought, had almost reached the point of being "mal-adjusted" because of their emotional problems. But she added that children can be more distressed living in a breaking home than a broken home.

Like the other heads, she thought the principal problem was that the children were rarely at school long enough to benefit from it, though their attendance record was good. Only infrequently does a mother leaving a refuge get rehoused in the same area, and it is rarely possible for young children to travel far to school.

Most children at refuges are under 10. Only four of 35 children at the Wandsworth refuge were over, and they were all continuing at their old secondary schools. Travelling is not such a problem, and the risk of being seized by their father much less than it is for younger children.

Refuge life has particular problems for adolescents. The crowding and lack of privacy can be traumatic. Being forced to share a bedroom, not only with one's mother, brothers and sisters but also with another family is common. There are few quiet places where a child can concentrate on homework or reading.

If a child cannot go back to its old school, starting at a new one is more difficult for the older child, particularly when he or she is feeling insecure. Whereas the attendance of children from refuges at primary schools is good, the school counsellor at Chiswick Comprehensive, for example, said it was poor. But he did not think the children had any common behavioural problem apart from generally being quiet and withdrawn.

Andrew, a 16-year-old, who was at the Wandsworth refuge last year, was unable to apply himself to studying for O level and CSE exams. Although he took them, he has not bothered to return to the school to discover his results. Previously his teachers had talked of him getting a place at university. His mother believes that though finally Andrew began to feel secure, and apprehensive about leaving the refuge, the conditions were far from ideal for adolescents like him.

"School is not organized to deal with short-stay pupils. Nor is it necessarily the most suitable place for emotionally disturbed children. But schools can and do help many children at refuges to adjust to their new situation. And for many children living in a refuge can become a positive experience."

"I found it strange at first because of all the boys and girls, but now I've got lots of new friends", said six-year-old Ooki. Her mother echoed her remarks. "It's altered us for the better. I say that without a shadow of a doubt. Our relationship is much stronger, and we do more things together. We're now better prepared to live in a flat together on our own."

The unacceptable face of publishing

Dorothy Kuya argues that many new books for schools are simply more colourful versions of earlier texts which inculcate racist and imperialist ideas in children

It is six years since I started evaluating school textbooks for racial bias, keeping a close watch for distortion and omission of facts. I am concerned at the failure of publishers to update their material, to make it more appropriate for multi-racial schools.

All children have to attend school for 11 years, and if they see no other kind of book, they will see and read a school textbook. These will have been chosen by teachers from a publisher's list or exhibition. Many of them have been and are still written by teachers, heads and ex-HMIs.

Yet teachers have not been trained to handle biased material. They are often insensitive to racist content. Many school books written in the seventies appear to be more colourful versions of books written in the forties, with no change of approach in the handling of subjects, or the ideas within them. Colonial poses are struck; the white man is still in charge.

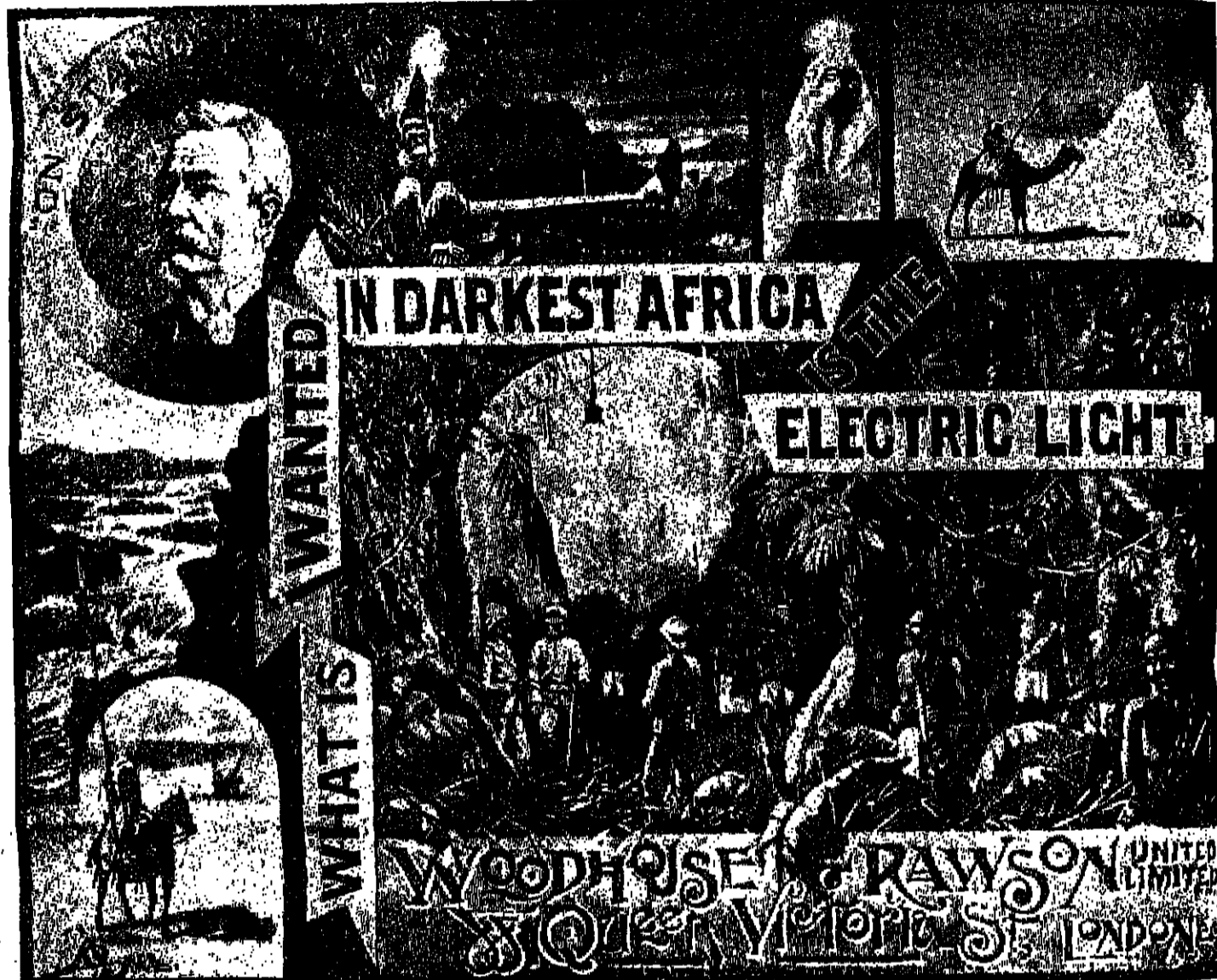
It would be wrong to suggest that all writers of books for children are wilfully out to corrupt them, or that all teachers are deliberately out to undermine the culture and identity of children of overseas background. But we need to recognize that the formation of beliefs and the acquisition of knowledge and cultural attitudes becomes to a large extent a subconscious act. Children acquire attitudes and values from adults around them; for a variety of reasons, they are not able to contradict information given them in schools.

There is nothing wrong, at least with older children, in using some of our 80-year-old classics, or our 40-year-old textbooks, as long as they are approached with a critical awareness of the social and political ideas they convey. But teachers must give a lead in creating this awareness. As Bob Dixon points out in his new book, *Catching Them Young*, no matter when books were written, we have to apply contemporary standards in evaluating them.

School textbooks, instead of giving children facts about the world in which they live, and helping them to appreciate and respect other people's cultures, are rife with imprecision and self-indulgence, distorting facts to bolster the writer's chauvinism. Political events are evaluated from a Western viewpoint; rarely, in discussion about countries in the Third World, do we find raised issues such as oppression by the West, or expropriation of land.

It is not surprising that adults in Britain are unable to understand the politics of Africa, or that we are given a racist rather than a political analysis of General Amin's behaviour. The West has helped to make him what he is: Britain was the first to recognize his regime when he overthrew the previously elected government. A political evaluation of what is happening in Uganda would require a self-critical approach, which most British writers are unwilling to make.

Books for children have on the whole failed to convey the truth about the European role in Africa, the West Indies, Asia, South America and the Far East. Traditional authors have failed to make today's books more relevant to the world in which our children are growing up. We must have literature which will help to create an understanding about what is happening, books that will help to develop an appreciation of what Arnold Wesker called, when commenting some years ago



The imperial message, late nineteenth-century style, is today's textbooks really much less colonial in their messages?

on a speech by Enoch Powell: "The added interest, the new ideas, fresh challenges and the enrichment of the kaleidoscope that is Britain."

A few publishers are making tentative efforts to publish better history and geography books. *Pavani is a Sikh* and *Nahda's Family* (A. & C. Black) are examples of the new wave, though I would be interested in the opinion of a Sikh and a Muslim before I recommended them. Penguin made an attempt a few years ago, when they published *A plague of Europeans* by David Killingray, an extremely good book about Westerners in Africa since the fifteenth century. Nearer home, there is *Looking at Welsh History*, two volumes written for the junior secondary age range that improved my understanding of Welsh Nationalist demands.

Alternative publishers, usually with a community base, have appeared: Bogle L'Overture, Beacon Bookshops, and the Writers and Readers Publishing Co-operative are just three examples. They usually have a bookshop as well as publishing outlets. Writers' workshops are springing up, usually in working-class areas, and some exciting working-class history and literature is coming out of these groups.

Other publishers making a particular effort to produce more balanced material are Holmes & McDougall, Longman and Collins, the latter having organized a competition for books reflecting the multicultural nature of our society. Yet children's book publishers lack an overall policy for their publications. It is a common experience at book exhibitions to see racist and non-racist material on the same stand.

Efforts are now being made to find appropriate alternative materials for use in schools. A number of education authorities have advisers on multicultural education, most of them concerning themselves with in-service training for teachers, and the creation of new materials.

Teachers' attitudes, and the lack of relevant learning materials, have at last been recognized as the main cause of black children's failure in British schools. Teachers' centres are linking up with schools in the production of materials. The ILEA English Centre, in Ebury Road, London, has published four books written by children which are on sale to the public. In Lewisham, materials about the neighbourhood are being made in the teachers' centre: they include workbooks for children as well as books for the teachers.

Imaginative projects are being developed, such as the study by the ten-year-old children of Granby Street School, in Liverpool, who have collected and compiled information about their cosmopolitan neighbourhood. One head of a Liverpool comprehensive has set up a working group, to look at the development of multi-racial education in the school. Any teacher can attend, and some outsiders who have expertise to offer are members. The first task they set themselves was the monitoring of books in the school.

There is, however, some resistance from educationists to the new material. There have, for example, been objections to the *Natty Dread* Alphabet Book, published by the Lambeth Teachers' Centre, which emphasizes the cultural values of people from the Caribbean. There have been complaints that it is too Rastafarian, anti-society and separatist. Similar points were put when I recommended the James Baldwin book about Angela Davis, *When They Come in the Morning*. The teacher concerned had not read the book, but claimed to know all about Angela Davis.

These are scattered attempts, initiated by people with commitment and understanding, but there is still no overall national policy on multicultural education,

there is no permeation of the whole curriculum with these good ideas. Teachers are often governed by CSE, A and O level syllabus which, whatever the teachers' intention, often force the child to read racist material, and to answer loaded questions.

The O level GCE general paper, used in Liverpool in 1974, among many slanted questions asked the student "to consider the problem posed in Britain by coloured immigrants. Discuss how successfully they are being tackled." The assumption behind this question is the widely held one that immigrants, if they are coloured, are a problem. But how is a "coloured immigrant" supposed to answer that one? It would be interesting to see the briefing material given to students in preparation for this examination.

All the anti-racist material in the world will not change what is happening in the classroom, unless teachers are willing to submit themselves to a process of consciousness raising. In his book, *Bob Dixon* quotes the first verse of Kipling's *Recessional* as an example of that writer's imperial sentiments:

God of our fathers, known of old,
Lord of our far-flung battle line,
Beneath whose awful hand we hold
Dominion over palm and pine—
Lord God of Hosts be with us yet,
Lest we forget—lest we forget.

I remember singing it as a hymn in school. I wonder how many immigrant children are still expected in assembly to sing to the glory of Britain's Imperial past?

Dorothy Kuya teaches at the Kensington Institute of Adult Education, London. She was formerly senior community relations officer for Liverpool.
*Revised in the TES on July 1.

Bouncing through Broadway

Cal Finnigan at the Beaulieu jazz festival

Jazz returned to Beaulieu recently after a gap of 15 years. Those in what the French might call their deuxième jeunesse may remember the stir caused by the original Beaulieu Jazz Festival series. The first one was in 1956 (could it really be that long ago?) and to a nation which associated outdoor music with park bandstands and the Foden Motor Works with the idea of an open-air, extended jazz festival on the front lawn of one of Britain's stately homes had a disquietingly decadent flavour.

In the event the Cassandra proved both right and wrong. After a shaky start—about 1,500 turned up in 1956—the Beaulieu Festivals caught the youthful imagination and became immensely successful, attracting over 20,000 people at their peak.

But as Lord Montagu, who had been inspired originally by the Newport Festival in America, now wisely observes, they were the victim of their own success. The last two events in 1960 and 1961 were marred by ugly crowd behaviour which received a great deal of publicity. "It was very mild really, a bit exaggerated," he says. But nevertheless, it had proved a real proof for him that the event provided final proof for him that the facilities at Beaulieu just could not cope with such numbers. "It's obviously nasty when one sees a crowd get out of control on one's front lawn."

So the event was dropped, leaving Lord Montagu to ponder with mixed feelings, as others did the path he had pioneered, on the fact that he was the father in this country of both the pop festival and of the pop festival riot.

The following year he helped promote one more jazz festival, with Dizay Gillespie, Buck Clayton and Billie Froeman. But Beaulieu's well-groomed lawns were left unscarred by this event which was held in Belle Vue, Manchester.

Lord Montagu says: "The interesting thing is that that was the watershed between the peak of the jazz following and pop music coming in. Within a couple of years nearly all young people had gone over to the Beatles-type of music and jazz had gone down. Therefore had one kept going, it's quite possible it would have become smaller and more controllable."

But he didn't, and for 16 years traditional jazz and quiet returned to the Hampshire village—until it rang again recently to the sounds of former Count Basie sideman, Joe Newman, and a group of fellow Americans, including veteran jazz violinist Joe Venuti, saxophonist Zoot Sims and pianist Teddy Wilson, all of them moonlighting from a 17-day jazz festival in Nice. The international festival is to be seen this time, says that the international conference is to the sociologist.

Although the jazz hadn't changed much, a year now pass through the house and grounds and the old Montagu Motor Museum has become the National Motor Museum with one of the finest collections of veteran and vintage cars in the world. Facilities (the lock of which persuaded Montagu to end the jazz festival in 1961) are now present in abundance and he decided to retreat old paths by celebrating the twenty-fifth anniversary of the opening of the house to the public—"it's our Silver Jubilee too"—with a series of concerts of classical and folk music and, as the nostalgic climax, jazz on Saturday and Sunday.

Last time there were more people than facilities. This time, sad to relate, the balance was the other way and only about a third of the expected five to six thousand turned up on Saturday. The staging was carefully planned, the setting beautiful. On a huge asphalt apron, outside the motor museum, surrounded by lawns and trees, a large, well-lit stage and several banks of seating were installed, £8.50 for seats nearest the stage (full), £6.50 further back, and £3.50 on the lawns at either side.

Jazz in the open air is always an uneasy mix. Like politics, its natural habitat is in smoke-filled rooms behind closed doors. So

there was a slightly flat feeling in the air when at 7 pm sharp the Southampton big band, a business-like local group, opened the show and scored all the rocks for miles around from the trees. Shortly afterwards when a chill wind struck in from the Solent as the shadows began to lengthen, the open spaces and empty seats began to take on a distinctly forlorn look.

It was at this crucial moment that the first American group, fronted by Newman and Zoot Sims, came to the rescue, bouncing through "Broadway" and a medley during which the shuffling and amiable Sims, now 52, cheered everyone even further by grunting "Who needs drums, anyway?" when the rest of the band decided to rearrange the instruments during his beautifully turned solo on "Memories of You".

In the rhythm section, bassist Major Holley, who lived and played in London for some time in the fifties and has worked with Woody Herman and Duke Ellington, and drummer Bobby Rosengarden (who works mainly in TV but was over here recently with the World's Greatest Jazz Band), swung along nicely after some initial amplification trouble. Taddy Wilson, now 65, seemed out of touch and kept a low profile. But the band had lit a fire which burned increasingly brightly through the night.

The sentimental highlight of the evening was the appearance of Joe Venuti, probably the most eminent of the tiny band of jazz violinists. Venuti, whose Blue Four partnership with the late guitarist Eddie Lang is one of the legends of jazz, romped through a selection of standards with a rare humour and vivacity which made a mockery of his advanced years (he claims he is 82; Leonard Feather has his birth date as 1904).

The British contingent included Kenny Ball, Alex Welsh, the Eddie Thompson Trio, and the Bobby Wellins Quintet. Wellins, one of the most original and influential British jazz musicians until ill-health forced him to quit some years ago, is now making a comeback. His new group, playing standards and his own compositions, makes use of Afro-Cuban and Latin percussive effects and includes a gifted, young, blind pianist, Peter Jacobson—a name to watch.

Finally, there was Mally, "the first of the punk jazzers" as he called himself, outrageous, funny and irritating by turn, but always entertaining.

The enduring memory of Beaulieu 1977 will be that of the venerable Venuti, during the Americans' final jam session, dancing, skip-pling and singing round the stage to a thunderous "Times a'Wastin'" every gesture demonstrating his joy and pride in his craft.



Major Holley (bass), Joe Newman (trumpet) and Zoot Sims (tenor sax)

A change of course

Jane Mercer on some new moves at the British Film Institute

The recent resignation of British Film Institute chairman, John Freeman, after serving only six months of a three year term of office, seems to have overshadowed an even more important vacancy in the Institute's administrative structure—certainly as far as readers of this journal are concerned. The head of the Educational Advisory Services of the BFI (EAS) left his post in December 1976 after signalling his intention to move on for some months. It did, then, seem rather odd that by April 1977 there was still no sign of a replacement being appointed to fill the vacancy at the head of one of the Institute's seven major operational divisions.

Early in April the management of the BFI made an announcement internally that, after interviewing a number of candidates, the selection panel for the post had decided not

to make an appointment, but wished instead to instigate a thorough-going review of the work of the department and its relationship with the educational world. This is to be carried out by the director, Keith Lucas, and (following the expression of some disquiet by the EAS staff at the prospect of remaining leaderless for an unspecified period of time) a date of January 1 1978 was set by him as the deadline for the post to be filled.

A recent correspondence in this journal, triggered off by an article by Stanley Reed (an ex-director of the BFI and a pioneer of the theory of teaching about film in formal education) concentrated on the issue of the Institute's relationships with the Society for Education in Film and Television (SEFT) and the National Association for Film Education (NAFE). The point was that the various opinions expressed in the letters on the subject did not really get to grips with the essential issue of the BFI's own direct role in film education, as opposed to its secondary role as a funding agency for other bodies and activities.

This rather curious emphasis—indeed, omission—in Mr Reed's "historical perspective" (rightly commented on by the acting head of BFI/EAS in a subsequent letter) was perhaps occasioned by an undue reluctance to analyse in detail the work and influence of a body of which he was quite recently the leader—he left in 1972). Whatever the reasons, it did ensure that the exchange of views which followed were something like rarely got close to the "central issues" of national political life.

These were, of course, touched upon, but

what was not clearly said and what is obviously at the root of the decision to postpone the appointment of a head of the Educational Advisory Services is the urgent need for the BFI to resolve the opposing but not necessarily mutually exclusive policies existing within its own walls. These can perhaps best be briefly described (to borrow the terminology of grammar) as the "prescriptive" and "descriptive" schools of thought. At their polarized extremes this means the existence on the one hand of a body of opinion within the BFI (with especially strong adherents within EAS itself) advocating the imposition by the Institute of a "film culture" on its constituency. This would concentrate on certain key issues such as "authorship", "genre", "realism" and would only recognize certain areas of film activity as suitable for promotion and investigation by the BFI by means of highly integrated and prescriptively documented policies.

On the other hand, the existing policy, illustrated best by the programming policy of the National Film Theatre and the growing trend towards devolution through the work of the Film Officers of the Regional Arts Associations, is based on a laissez-faire principle whereby the Institute and its departments very largely respond to need, to demands and suggestions from outside. It is, of course, not that simple or directionless and the work of both the NFT and the Regional Departments, fit to mention the National Film Archive and the Information and Documentation Department is all based on quite clear operational and theoretical criteria which could be loosely summed up as covering the maximum amount of ground, and opening up as many areas of

film activity for as wide a range of people as possible.

As always, the right answer undoubtedly lies somewhere between the two extremes but it is against this background that the review of the work of EAS and the non-appointment of a head of department after its completion must be seen. The department has played a key role in advancing and supporting the prescriptive policy and if the BFI is finally to formulate an overall policy for its work in the next year then the question of whether the EAS continues in its present stance or approaches closer to a middle way will be of vital importance.

What should not be overlooked in all this, however, is the valuable continuing work of the department. However mystifying and gnawing some of its utterances may be, and however daunting the terminology and convoluted the sentence structure, a reading of the EAS annual report (published in April and covering the year 1976) is reassuring and exciting. After all, who could argue with the recognition of a need for a shift of emphasis from "a traditional concern with aesthetics towards the relations between aesthetic practice and social institutions" or feel that a "Hammer Horror Resources Pack" or a project on the "Image of Women in the Media" were recherché, over-intellectualized subjects?

There is undoubtedly good, genuinely useful and exploratory classroom and student-oriented work being done and encouraged and one can only hope that the political appointment in the new year will not affect this important area of the BFI's work.

20 Books/Psychology/Science

Well-prepared packages

Eileen Pickard on psychology

Psychology: An Introduction (third edition). By Jerome Kagan and Ernest Haveman. Harcourt Brace Jovanovich £7.90. 25 572617 X.

While introductory texts can evoke fears of packaged psychology and learn-by-heart generalisations, there are some worthy texts which should provide the student with clear, unambiguous information.

Their book is well structured. Each chapter is preceded by an outline of its content and concludes with a summary and suggested reading. The text is rich in diagrams and photographs which give glimpses of laboratory, assessment and other situations.

Generally the information is presented clearly in an easy conversational style, though a few of the definitions could be improved.

Repeated statements such as: "the behavioural and S-R theories" can lead to classification problems of a type somewhat resistant to extinction, particularly on introductory courses.

Most writers of textbooks focus on content and its presentation, and few on the process of the book. (Notable exceptions are some of the Open University texts.)

Coleman's is a quite different work. A first glance might suggest a book of readings, but this is in fact a well and purposefully structured text.

The first of three main sections deals with fundamental processes of psychological functioning.

Muckay's chapter on learning. The focus is largely upon principles underpinning behaviour control and change and he concludes with references to biofeedback methods.

The third and final part of the book looks at those aspects of social psychology which are of direct relevance to the patient.

Kagan and Haveman present the student with an attractive package. It is colourful, up-to-date and well prepared.

Harsh realities

A. Rupert Hall on science and society

The Force of Knowledge: The Scientific Dimension of Society. By John Ziman. Cambridge University Press £4.75. 521 09917 X.

Many books have been written about the "facts of life"; this one about the facts of the scientist's life grows out of lectures given by John Ziman, professor of physics at Bristol.

Though of serious intent the picture is painted with a light touch, and if poison gas and megadeath find their inevitable place along with the zip fastener and radar.

Professor Ziman's comments are refreshing, vigorous and not always flattering. Ideas move around inside people. Of materials science: "We observe a typical social phenomenon, whereby an applied science tries to borrow a cloak of respectability by becoming more theoretical, pure and apparently useless."

falls naturally into a larger part devoted to "little" science and a smaller part devoted to "big" science since 1945. Some material in the former part, for example the discussion of J. D. Watson and the Double Helix, also relates to the post-war years.

In the second part of the work Professor Ziman writes with greater assurance on the financing of science, science and war, science policy, and so forth—with a good deal of distrust of sociology as a science.

The book is pleasantly and, in the whole, skilfully and relevantly illustrated. One graph is needless, duplicated and some captions might be improved.

21

Sixth-form general studies

Derek Wyatt

General studies is a growth industry. For too many years it suffered under various non de plumes—social studies, use of English, art for scientists, science for artists and, occasionally, courses offered by staff.

These were single periods, and no attempt was made to inter-relate them. Not much could be achieved in a single period of 40 to 45 minutes, mainly because the staff allocated to teach these periods did not consider them as important as their A level teaching.

Now that use of English is not a prerequisite for entry to all but one university there has been a gradual rethink of general periods in the sixth form.

The problem has been, how to timetable general periods, and should they be considered on a par with academic studies?

Of course if subjects are to be covered adequately they do require a whole morning or afternoon. Invariably, afternoons are shorter in teaching time, and if a topic has to be seen drifting out as 4 pm to catch their only bus home—and it can be embarrassing for speakers.

General studies in day schools is more suitable for mornings.

Perhaps the greatest trap to avoid in absorbing such morning sessions is in adopting the "conference approach". This implies: introduction to topic; speaker(s) and/or film, questions, break, discussion groups, plenary session (sometimes discussion groups might be replaced by a second speaker).

While this is acceptable for some topics, it can develop into situations in which speakers speak and students listen. This is not the most effective way of teaching, particularly when there are between 100 and 150 students listening.

Week 1—A subject that is either controversial or student related—drugs, alcoholism, cancer, sexually transmitted diseases, contraception introduced discussion group format.

Staff courses may require hiring of mini-vans and course material such as slides or overheads. General studies done well cannot be done cheaply. This is another source of conflict in the overall allocation of money for subjects.

the Beethoven symphonies. Spain today, art and artist in East Anglia, motor cycle tuition, ballroom dancing, board game, (Majnun and approach". This implies: introduction to topic; speaker(s) and/or film, questions, break, discussion groups, plenary session (sometimes discussion groups might be replaced by a second speaker).

Week 10: Film—usually related to the English specialists—Romeo and Juliet; or the historians—A Man for All Seasons; or of general interest—Kes; or simply entertainment—Dr Strangelove.

Staff courses may require hiring of mini-vans and course material such as slides or overheads. General studies done well cannot be done cheaply. This is another source of conflict in the overall allocation of money for subjects.

General studies adds a new dimension to the sixth-form curriculum. It enables different relationships to be built up with students. It stretches staff and encourages experimentation. It brings schools closer to the real world.

Derek Wyatt is director of general studies, Ipswich School, Suffolk.



Pupils on disruption

W. P. C. Mills



Well, I don't think it improves the uniform.

As part of a recent survey of seriously disruptive behaviour in the secondary schools of one L.C.A., pupils' opinions were sought on four topics. Eleven schools nominated seriously disruptive boys and girls, between the ages of 13 and 16, who were matched for age, sex and IQ, in the same schools by average "conformist" pupils.

The instruments of measurement were a questionnaire of 30 statements, using five-point scales for agreement. These were cross-checked by 15 open-ended questions, and an individual structured interview with each pupil—disruptive and conformist—a part of which were 26 questions dealing with these topics.

The "Pupil Opinion" questionnaire answered by 116 boys and girls did produce significant differences in attitude between disruptives and conformists, but only in 22 of the 30 statements. At the 5 per cent significance level were five statements concerning bullying and "playing up" teachers, and at the 1 per cent level seven statements about vandalism and school uniform.

Eleven disruptives used obscene expressions to describe teachers who used praise, about the school's curriculum, the school's requirements regarding pupils' personal appearance, and what they considered "doing well in school" was.

Again, the structured interview contributed to a sum total of considerable contrast in attitude to the four topics. Its questions referred only obligingly to them, but the answers given verbally showed the concern felt by many of the disruptives—girls and boys equally—for the victims of bullying, a disregard for public or private property, and a deliberate resistance to the school's modifying influence which they were acutely aware of as "interference".

Teachers are often sceptical about pupil opinion gained by a researcher (or social worker, or educational psychologist) face to face. But often it is only by way of narrow and direct confrontation that a glimpse of the real individual can emerge.

One still wonders how accurate measurement of pupil opinion can be. When they are so obviously role-playing, adapting themselves to their changing social environment, how sure can we be that they tick truthfully, or write and speak with honesty? From how many angles must a researcher "vector in" to pinpoint truth? And having made the mark, how trapped do we unconsciously interpret in terms of what we expected to find?

vote for a statement concerning the defacing of notices in school, and scrawling on books and equipment. The open-ended sentences, though not so easily scored, provided a more enlightening picture of the differing attitudes to acceptable and unacceptable behaviour within school and elsewhere of the two groups. Five disruptives either refused to complete any of the sentences, or omitted to complete those they found awkward. Two more pleaded that they were unable to write (completely disapproved by their head).

Many of the disruptive students restrained their tick from its true destination because apparent to the researcher in a number of different circumstances: one of which concerned a visit to one of the schools involved. During a speed discussion between a disruptive boy of 15 and his control about teachers' disruptive complaints, the disruptive allowed a teacher to come late to a class, but punished a pupil if he should arrive late.

More surprisingly, some disruptives, apparently devoted to their group of bullying, teacher-baiting, equipment-spoiling ruffians, are unhappy to be trapped by the subculture which has more attractions for them than the main flow of pupil life.

W. P. C. Mills is head of the County Secondary School for Boys, Crewe.

A flawed history

Noel Hughes

Britain 1945-70. By L. A. Monk. Ballantyne £8.95. 7135 1897 9. £4.25. 7135 1902 9.

To have written an account of a quarter century of contemporary British history within 400 pages is an achievement to be recognized—even before one considers how well it has been done.

Mr Monk has divided his book into five parts: three deal with eras of politics, the postwar Labour government, the Conservatives from Churchill to Douglas-Home, and Labour from 1964 to 1970; one deals with the changing Common Market; the concluding section on Society, Science and the Arts. The plainly political sections are marvels of compression and commendable in their impartiality.

Review letter

Sir, John Holloway, reviewing my String Playing in Baroque Music, questions the importance I attach to shaping the line, wanting instead "the expressive motivation of each short phrase, and the vivid portrayal of question and answer, statement and response".

In doing this on that glorious recording of mine, I like very much that way of putting it; but the more you make these essential breakings and stretchings, the more you first need to spin the soaring arch of the line you are going to break and stretch—very like the Rowing bet canto on which so much baroque instrumental music was modelled.

Edmund Power, OSB

Among this week's contributors:

- C. J. Drumfit and Brian Davies are at the Institute of Education, London. A. Rupert Hall is professor in the department of the history of science, and technology at Imperial College, London. Noel Hughes was until recently a director of Associated Book Publishers. Bernice Martin lectures in social studies at Bedford College, London. Eileen Pickard teaches at Digby Stuart College, Roehampton Institute of Higher Education. Tony Cline is an educational psychologist at the child guidance unit, Woodberry Down School. Antony How is professor of philosophy at Reading University. Edmund Power, OSB, is at Douai Abbey. Alan Tuckett is principal of the Friends Centre for adult education at Brighton.

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HMSO BOOKS

The rational mind

Logic, by Wilfrid Hodges (Penguin £1.25)

Logic, by Wilfrid Hodges (Penguin £1.25) is a textbook of logic rather than a contribution to a general study of philosophy. It is intended for pupils, and is thus to be compared with, for instance, Susan Stebbing's Modern Elementary Logic, not with her Pelican Thinking to Some Purpose, nor with the even longer-in-the-tooth Straight and Crooked Thinking of R. H. Thouless. Since Dr Hodges is writing a textbook he takes for granted his readers' initial desire to make a study of the subject.

To keep the conversation from being too one-sided, I put in fairly frequent exercises, and "You are strongly urged to try to answer these as you reach them. Correct answers are given at the end of the book".

Nevertheless, at the end of the day, despite all the author's good intentions and fair practice, I have to wonder whether there are many unexpert readers who really will work through this whole book by themselves, and not in a class with a visibly responsive, gently pushing teacher. No doubt English books will, at usual, succeed in selling more copies than any other publisher could. But how many of the individual sales will be to people—a significant proportion surely of many other publishers—who never actually get around to picking the book up again once they have carried it home?

Edmund Power, OSB

who only spend and shelve. Without them, Dr Hodges would be getting much less in well-deserved royalties for his hardworking book, while his actual readers—nearly all using this Logic as the set-text for a course—would be paying much more for it. What makes it all possible, I suppose, the publishing equivalent of the mustard left on the plates—which is, notoriously, so much more than the quantity eaten!

Spinoza, by Stuart Hampshire (Penguin £1.00). He wished to be entirely self-reliant as an individual, being no more than the mouthpiece of pure Reason. Spinoza forms with Descartes and Leibniz the great trinity of seventeenth-century continental Rationalists. Starting from his main premise that the Universe is one substance, equally God or Nature, revealed to us in the two attributes of thought and extension, he produces a complete metaphysical scheme. From this, by ruthless logic he derives his views on knowledge, morality, politics and religion.

For the layman, philosophy often appears as a strange dialect. Professor Hampshire's exposition of Spinoza's metaphysics is doubly clear: it is one substance, equally God or Nature, revealed to us in the two attributes of thought and extension, he produces a complete metaphysical scheme. From this, by ruthless logic he derives his views on knowledge, morality, politics and religion.

Edmund Power, OSB

Science

Commissioned by Chelsea College Centre for Science Education

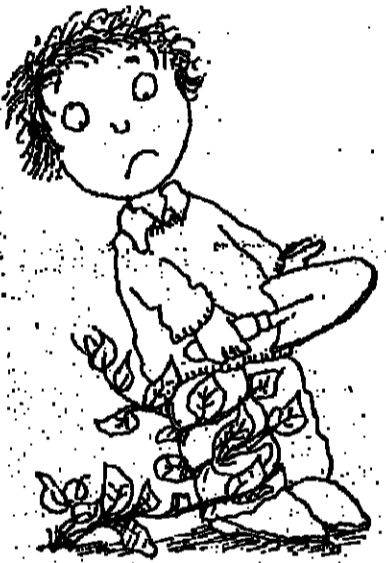
The chemistry of sensitive plants

John A. Barker and John Wray on plant hormone kits

Plant Hormone Kit ZGN-200-V £10.78. Griffin and George Ltd, 285 Baling Road, Alport, Wembley, Middlesex HA9 1JJ.
Harris Plant Hormone set, M83800/3 £17.75. Harris Plant Culture set M83700/9 £5.00. Philip Harris Biological, Oldmixon, Weston-super-Mare, Avon BS24 9RJ.

Most of us are dimly aware of some of the ways in which chemicals affect plant growth. We use fertilizer solutions and selective weedkillers, we buy dwarf potato chrysanthemums and we have heard about hydroponics.

To biologists the appearance on the market of well conceived kits containing plant growth chemicals, hormones and instructions for simple investigations on their effects, is particularly exciting. In the past there has been relatively little practical work about plant hormones that was of short duration, easy to carry out and likely to give good results to unskilled hands.



At school level, work with plant hormones was usually concerned with the few identified types, the auxin. It was mainly theoretical and concerned the effect of auxin on the coleoptile tips of developing oat seedlings. Much play was made in repeating the classical experiments by which auxins were discovered.

Today, however, a considerable range of plant hormones have been identified and many of these, or their artificially prepared analogues, are important products of considerable economic value. Using these artificial products a range of investigations can be carried out on a variety of physiological actions.

The contents of the plant hormone kits from Griffin & George and Philip Harris are similar. They contain the following chemicals: lanolin, lanolin with 0.1 per cent IAA, agar, indol-3-yl acetic acid (IAA), coumestrol, gibberellic acid, maleic anhydride, maleic anhydride-maleic anhydride (MENA), 2,4-dichlorophenoxy acetic acid (2,4-D), 2,4,5-trichlorophenoxy acetic acid (2,4,5-T), and 2,4,6-trichlorophenoxy acetic acid (2,4,6-T).

6-sulfuryl amino-purine, a kind which does not appear to be used and Tween 20, which is used in making up lanolin paste impregnated with IAA. There are also five copies of the booklet.

Also included in the Philip Harris kit is sucrose, used in an investigation into the effect of IAA on shoot growth and Thiourea used, for example, to break bud dormancy in an investigation on the sprouting of potato tubers. An additional concentration (0.01 per cent) of IAA in lanolin is provided—a useful inclusion as making up of such materials is a rather messy procedure. There is one copy of the notes.

Only in the Philip Harris set is the quantity of such chemical given. This is certainly an advantage as it permits more effective forward planning. The chemicals are packed in excellent plastic containers for safe handling. The two instruction booklets give a similar range of experiments, more than threequarters being exactly the same.

The Griffin & George booklet, by D. F. T. Burke, starts by suggesting very simple experiments into the nature of plant growth, so laying the foundation before any work on hormones as such is begun. The experimental section of the booklet is divided into three parts. In the first, the functions of auxin in plant tropisms and their effects on plant development are investigated. In the second, other plant regulators such as gibberellins, kinins and natural inhibitors are discussed. All the experiments in this part are concerned with the use of gibberellic acid.

In the final practical section a further range of possible experiments are suggested in a wide area such as further work on tropisms, dormancy and leaf fall. The booklet also contains an outline of the theoretical background. In a revised edition some note could perhaps be made of ethene (ethylene), produced naturally by plants and also by car exhausts, and its effects on plants as this has environmental implications. Appendices give information on experimental techniques, statistical analysis, the chemical composition of the hormones and a short list of references.

By contrast, the Philip Harris booklet is much shorter. It provides a clear and concise account of the variety of plant hormones, incorporating details of chemical structure. This is followed by brief accounts of how to carry out fifteen experiments, the final four of which extend the work done in earlier ones. Technical notes for using the materials are provided and there is a reference list for further reading.

Of the two booklets, it is much easier to see the wood from the trees in the second shorter work. The explanation of plant hormones is clear and will be of considerable value to teachers. However, when it comes to working through the experimental instructions the Griffin & George booklet has the advantage. The instructions are well laid out and, although there are occasional lapses, in general the level of sixteen no mention is made of recutting the ends of seedling

stems under water to avoid airlocks in the xylem vessels.

The Philip Harris booklet also has some defects, an incorrect number of potatoes is given in one experiment and there is no mention of an appropriate control in an investigation into the effect of auxin in controlling leaf fall. In both booklets the term "experiment" is used incorrectly. All the so-called "experiments" are investigations since none is set up to verify hypotheses under controlled conditions.

One investigation that was carried out involved the control of bud sprouting in potato tubers. Prevention of sprouting has a considerable economic importance as, if the buds develop and rot during storage, valuable stored food is used up. In contrast it is useful to be able to break bud dormancy when required so that the tubers will develop when conditions are ideal for growth.

Basically, the instructions in both kits are similar. The investigation shows that Methylgibberellin-acetate (MENA) inhibits sprouting and that Thiourea breaks bud dormancy. The Griffin booklet carefully explains why the differently treated potatoes must be separated, sections MENA is volatile and could, therefore, affect all the tubers. The Philip Harris booklet neglects this explanation



and also does not indicate the type of environment in which the tubers should be kept.

Both accounts are inadequate in at least one respect, as neither explains how to dissolve MENA in water to make a 1 per cent aqueous solution. Despite great efforts, we found it impossible to dissolve, at the best only fine suspensions were produced. However, these were adequate for the investigation.

Details of investigations developed for Nuffield Advanced Biological Science were present in both kits. Perhaps the best of these is the one which investigates the effect of unidirectional light on oat coleoptiles. Using the technique explained in the booklets, it is possible to investigate the topic responses of coleoptiles towards light during a double period and show students that the response really are dynamic organisms.

Another investigation that could make a useful contribution to the teaching of genetics is one which investigates the effect of gibberellic acid on the growth of dwarf maize. Dwarf maize is a genetic variety of maize. The investigation shows that after treatment with gibberellic acid the dwarf maize grows to the same height as normal maize. The gene responsible for dwarfness in maize is a recessive one, the converse gene being the dominant allele, responsible for normal tall plants, is involved in the synthesis of gibberellic acid.

In fact all the investigations that we tried out following the instructions from the booklets worked well, but we would have liked to have seen some more explicit investigations on the applied aspects of plant hormones. Both booklets would have been greatly improved with some indications of the objectives of the work. However, the kits are well thought out and should stimulate interest in developing fields. The Philip Harris set is at present being revised and the investigations updated.

The Philip Harris Plant Culture Set contains a number of mixtures of plant nutrient chemicals including a "complete" mixture and a range deficient in one element only. Included in each set is a small four page booklet of teaching notes. Using the set, simple demonstrations of the effect of mineral deficiencies on plant growth can be easily set up. One part of the set contains mixtures to prepare Sach's water culture solutions. They are packed in excellent plastic tubes with snap fitting tops assuring long shelf life.

The contents of each tube are sufficient to prepare four litres of solution. In addition to the "normal" mixture there are seven others respectively deficient in calcium, iron, magnesium, nitrogen, phosphorus, potassium and sulphur.

The teaching notes have a summary of the functions of these elements and others, and the symptoms of their deficiencies. Thus by following the instructions the observed deficiency effect can be compared with the supposed symptoms. It is suggested that various seedlings and cuttings of Zebrina can be used, as indicated in the notes. However no mention of duckweed (Lemna) or other aquatic plants, in our opinion, for such work.

The instructions, although brief, are adequate. The importance of covering the culture vessel with a lightproof material is mentioned as is that of aerating the solution. Perhaps this point is inadequately emphasized, especially since when using cuttings it is often critical for their rooting and consequent survival. Moreover in our experience cuttings of herbaceous plants are the best material to use.

While you can prepare the Sach's nutrient solutions by mixing and dissolving suitable component chemicals this is a laborious task and very expensive, since relatively large quantities of high purity must be purchased. The set provides you with ready-made mixture and it does so cheaply. The water culture set costs £2.15 (M83715/1).



Drawings by P. W.

The other part of the total is sufficient chemical mixture to prepare 20 litres of Harris Complete Plant Culture Medium. This is equivalent to the "normal" Sach's water culture solution and is used as a nutrient solution for hydroponics or simply seed germination and growth, since it contains all major and trace element nutrition needed for a healthy plant.

Once again the brief instructions for its use are clearly written. They moreover show that the author is conversant with school laboratory practice and no special growing techniques using a special solution which would be suitable for most schools. For hydroponics, the process of preparing plants in an aqueous solution is necessary nutrition, the solution can be readily made using the Harris's set and support for the plant easily avoided with the pot and contained vermiculite, even well washed coarse sand.

Since this technique is very suitable for growing seeds or cuttings with a view to eventually preparing root-tip squashes, instructions in it are thoughtfully given in its teaching notes.

As with the water culture solution set a pack of complete plant culture medium chemicals is available separately for £2.85 (M 83710/7). In our total set, as in the illustration in the catalogue, there are five tubes containing this medium each sufficient to make 20 litres of solution. It would be most helpful if the weight of chemicals in each tube was given, as otherwise the weight needed to be dissolved in a litre, since this would enable small volumes of nutrient solution to be more easily prepared.



shown on the display. The balance of easy and difficult questions at all levels seems to have been carefully worked out.

Further activities with the calculator are suggested in a booklet *Pun with Maths Facts*, part of a package containing 18 games and activities. Some of the latter games attempt to introduce more advanced concepts. The Little Professor gives practice in skills only, and of course cannot explain how the correct answer is arrived at. Because only integer answers are available, the range of divide problems is restricted. Often the same problem is repeated up to three times and it seems a pity that decimal point and equals keys are not provided. This could have given a larger range of division problems and made the machine into a straightforward calculator also.

EXTRA

Building, equipping and furnishing a school

The brief required maximum teaching area on a minimum budget. Brian Mayes describes how it was achieved

In the space of a circle

Forms other than the square or rectangle are not unusual in educational buildings, but the circle is rare. Its attraction is the smallest perimeter around an enclosed space but the difficulties of planning within the circle usually militate against its use.

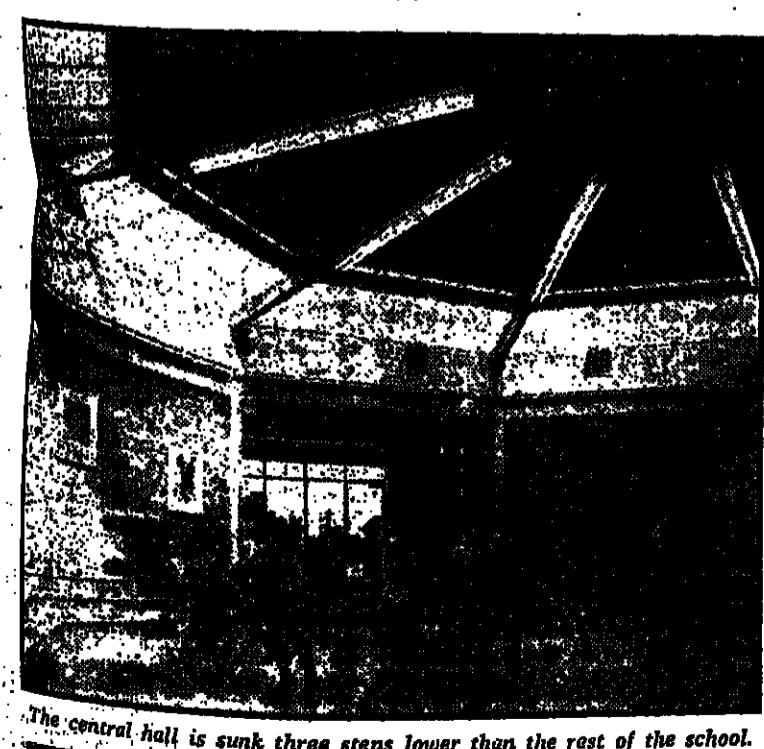
Why therefore select this form for what is nothing more than a small simple village school in Herefordshire? The explanation lies primarily in the extremely meagre budget allocated by the local education authority associated with a brief that required the maximum in teaching area within this cost limit. The area within this cost limit, the compact form was obviously attractive in maximum use of space and the spoke wheel plan with the main hall as hub provided an ideal solution to the relationships of the various rooms.

The new primary school replaces a Victorian building of the 1840s, which among other things had no dining room so that children had to be escorted daily to a hall near by. The local education authority brief was for a small junior mixed and infant school for 125 pupils with a fully equipped kitchen, so that meals could be prepared and eaten within the building. As the school is voluntary-aided with limited means, it was obvious that some doubling up of space would be necessary and a solution evolved based on separate teaching units for juniors and infants, each with its own lavatories, resource area and

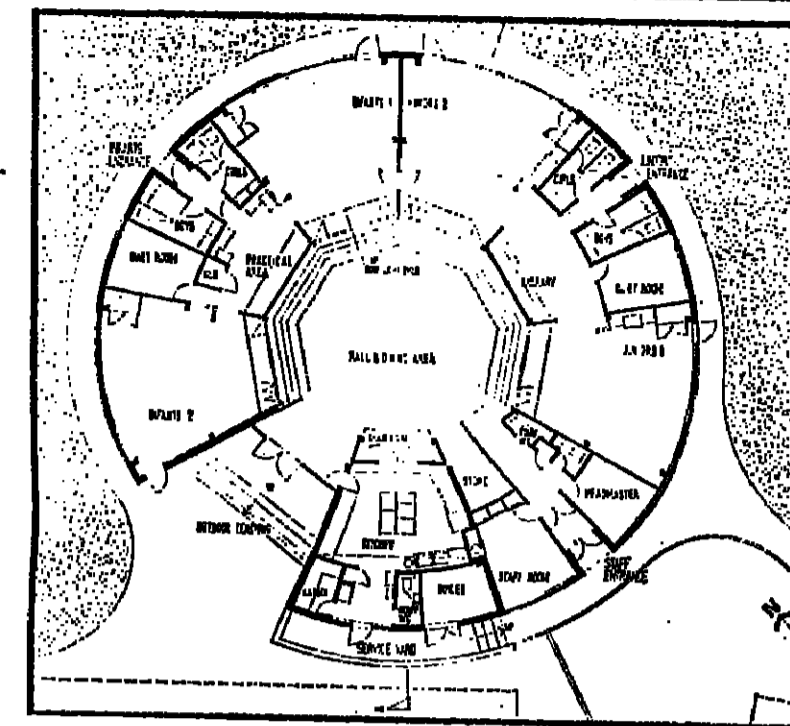
quiet room. These are linked to a communal hall used for assembly, physical education, drama, etc., which also serves as a dining area. The result is a brick building (total cost £75,000) in which nine separate elements radiate from a central polygonal space. The head's study, staff room and staff lavatories are off the main entrance hall, which also leads directly into the main hall. The junior and infant teaching areas are each divided into two linked classroom spaces separated by a resource area.

This area can also be entered from the outside by an entrance flanked by lavatories, and there is a quiet room (for individual or group work) on one side. One resource area is used as a library, the other for painting and pottery; there is also a kiln.

Each of the four teaching areas has a solid-core sliding folding door to the central hall which can then form an extension to any room. Or the areas can be used for seating or dressing rooms for end-of-term plays. The central hall is a nine-sided polygon and is three steps lower than the rest of the school, breaking the monotony of a single level building and allowing the use of these continuous steps as occasional seating. The shape also permits simultaneous functions and forms a natural core which is expressed in the pitched roof, peripheral petanque glazing (which also supplements the light in teaching areas) and the exposed brick painted walls.



The central hall is sunk three steps lower than the rest of the school.



Ground plan for St. Paul's School, Chipperfield. G.M.W. Partnership Architects.

parent teachers association supporting the school and this has provided such additional niceties as carpeting in some areas and a cloak-room-changing area to avoid the clutter of coats, boots, etc, which of necessity had to be planned in the classroom area.

Although the external shape is uncompromising and hardly likely to conform to the established building plan, other minor niceties such as the compact form has already been dealt with and further extensions are contemplated.

Brian Mayes, RIBA, is a senior partner of the G.M.W. Partnership.



The compact building has made it possible to retain the trees.

Era in four parts

Book review by Colin Ward

The English School, its Architecture and Organisation, Volume II, 1870-1970. By Malcolm Seaborne and Roy Lowe. Routledge and Kegan Paul £15.00. 0 7100 8408 0

Readers of Mr Seaborne's earlier book will not be disappointed by its successor, which has the same virtue of distilling a daunting mass of material into an orderly and even elegant text. The period under review neatly subdivides into four parts—the era of the school boards, and the revitalization of decaying grammar schools, from 1870 to 1902, the period between the establishment of the local education authorities and the First World War, the inter-war period, and the period

between the Butler Act of 1944 and 1970.

The first three of these sections have been contributed by Roy Lowe and the last by Malcolm Seaborne. Both authors have the happy knack of selecting just the right, most telling and typical contemporary comments and opinions which crystallize their era.

Each section fits a chapter on the social and educational background of the period, followed by one on elementary and one on secondary school buildings. Their method of presentation reminds us of many well-known "erech" in school design and organization.

They show, for example, that in their very earliest period, school architects made possible arrangements which "prefigured and bore some resemblance to the twentieth-century tripartite organization of secondary education" and that "to state the origins of some of our present discontent" we should look back to the Taunton Commissioners rather than to the Hadow report.

They demonstrate the strong medical influence on school design in the period before the First World War, with its emphasis on "school hygiene" and cross-ventilation. They document the rigidity of Board of Education control in the inter-war years, which effectively prevented innovation in school design until the very eve of the war, with the influential *New Chronicle* school design competition.

Opening with the attempt to move from the all-purpose schoolroom to separate classrooms in the elementary school, and closing with the open-plan primary school, the book reminds us of the practical nature of many of our educational debates. Mr Seaborne reminds us that we are in a period of widespread disillusionment about modern architecture, and of the existence of a school of thought which would abolish school buildings altogether. "We have also reached the point where educational systems of considerable complexity have come into being, the future of which seems more than usually opaque."

This handsome book is illustrated with 50 well-chosen photographs and 56 plans, ranging from Ben Jonson Street Board School, in Stepney, to Countesthorpe College. Apart from its historical importance it will give nostalgic pleasure to old classroom hands.

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Mathematical fun and games
Texas Instruments have introduced a hand-held educational toy for children of all ages designed to make mathematics fun. The Little Professor uses calculator design circuitry and a 9 volt battery. It has stylized red LED numerals, four mathematical functions and four problem levels. The face of the Little Professor is similar to most standard pocket calculators except that there are no decimal point and equals buttons and two extra buttons, "sec" and "go".
When a correct answer is given the Professor says "another problem." A wrong answer gets the response "WRONG" for error on the display and the problem is repeated. Three wrong answers trigger the right answer and the child has to press the "go" button for the next question. After 10 problems the number answered correctly first time is shown on the display. The balance of easy and difficult questions at all levels seems to have been carefully worked out.
Further activities with the calculator are suggested in a booklet *Pun with Maths Facts*, part of a package containing 18 games and activities. Some of the latter games attempt to introduce more advanced concepts. The Little Professor gives practice

in skills only, and of course cannot explain how the correct answer is arrived at. Because only integer answers are available, the range of divide problems is restricted. Often the same problem is repeated up to three times and it seems a pity that decimal point and equals keys are not provided. This could have given a larger range of division problems and made the machine into a straightforward calculator also.

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'Human' or 'artificial'?

It is the anticipation of the 'energy crisis' which has been the major factor in school building design...
By R. G. Hopkinson

Some of the most recently built schools look so different from their immediate predecessors as to cause comment and concern at what is happening. In place of the large windows and long corridors, school buildings are becoming tight and compact, with very small windows and total reliance upon artificial lighting.

Those who have been to the United States, and so recognize the trend, are concerned that the days of the post-war school, light, airy, and colourful, are numbered.

It is being done in the interests of energy conservation. A compact building loses less heat, and small windows aid heat insulation. In the limit, no heating system may be needed, all the necessary heating being obtained from the heat given off by the artificial lighting, and by the bodies of the inhabitants, in a new fashion.

Many educationalists and some parents are concerned at such developments. On the other hand, it is often said that children are so adaptable that even a major change in their school environment wears them down, especially if they are in the hands of good teachers. So why become alarmed for no demonstrable cause.

It is, perhaps, worth looking at the background history of school building, particularly in the past few years, when developments started in Hertfordshire under Aslin and Johnson-Marshall gained momentum and created a "style" of school building recognized throughout the architectural and educational world, and which gained Helsinki international renown and

a system of accounting which ought to have caused concern. The capital cost of the building was paid for out of one purse, and the running and maintenance out of another.

The then current policy required that the capital cost a place should be kept down to a minimum, regardless as to whether a building of such minimum cost was expensive to heat, light, and maintain.

For many years this anomaly was set on one side, though it was clearly understood. Only when the high cost of heating these rambling buildings, with their large single-glazed windows, was related to an energy conservation policy was any re-thinking put in hand.

Environmental engineering technology knew the answers, indeed had been advocating the answers for some time, but the political and educational pattern of thinking had to change before any use could be made of the available knowledge. When the change came, the pendulum, as always, swung too far the other way, and the compact insulated artificial school was here.

School buildings, like people, are individuals with their idiosyncrasies. Yehudi Menuhin once said, in relation to concert halls, that a sensitive artist felt the acoustics of the building as part of his musical equipment—a good musician gave a far better performance in a good hall than in a bad.

Perhaps some environmental physicists are unaware of this. It often seems that their only criterion of excellence is that the heat balance equations should come out

of a long teaching day. But they need not be.

If the pendulum is to swing back towards the "human" rather than the "artificial" school building, it will require the closest collaboration between the educationalist, the architect, the environmental engineer, and the politician and administrator. Perhaps the child too.

This collaboration has been better than perfect in the past. Much of the success of the best post-war attempts, by architects like David and Mary Medd, to get to know teachers and children and to be around their interpretation of their needs.

The ultimate in energy saving need not be sought, but it may be, then attempts should be made to assess priorities—do teachers and children actually prefer to be enclosed in thermal comfort rather than put on more clothes in order to do their work, or do they do their work better in the sun in summer higher than the sun in winter in autumn in spring in autumn—and so on.

Educational administrators are not nameless either on the occasion the environmental engineer was told to apply his skills providing more teaching space rather than more comfort. Perhaps he was right, but it needed to be spelled out why.

Above all, the role of the whole in defining the form and character of the building needs to be understood, and the knowledge of us now have better applied, in visual world plays so large a part in education that it must be respected by its proper partner, the school design. And what is told another time.

R. G. Hopkinson is Emeritus Professor of Environmental Engineering in the University of London and a consultant to the Department of Education and Science on Educational Buildings.

The new school at Llangybi

Cooperation has been the keynote writes Rae Milne



Yigol y Dderrt, Llangybi, Dyfed. The central court and garden which is an outdoor study area for the winter months.

New Area School—Llangybi. Design Study 2.
Welsh Education Office, September 1976.

Some readers may remember the Welsh Education Office Design Study 1 which appeared in November, 1975. Design Study 2 from the same source shows how the inevitable closure of small village schools can create an impetus to fresh thinking about the wider needs of a rural community.

In recent years consultation between those who design new schools, the local authority representatives ultimately responsible for them, and the teachers who will work in them has become a growing practice. In the case of the new school at Llangybi, this consultation must have reached a high level indeed.

The purpose is defined as being not merely to accept the inevitability of closing five small village schools because of dwindling numbers, but to think out a positive approach in designing a building to meet the needs of the children and children, aged between three and 11.

One must feel some regret that a child's first day at school should begin with a bus or taxi ride, making the familiar home setting seem a long way away, but distances are not great, and the advantages of a larger school planned specifically for this rural area are obvious.

This intention was not to repeat standard provision for a small urban school, and sit it in the country.

Any protests from parents about the loss of their village school or from teachers about new ways of working which might result from transfer to a semi-open building, must have been allayed by early notices, so that all approached the new community venture with a feeling of pleasurable anticipation and personal involvement.

The statement that design is a two-way process appears to have been taken into account throughout. Indeed costs could only have been met by pooling nursery, primary and community contributions.

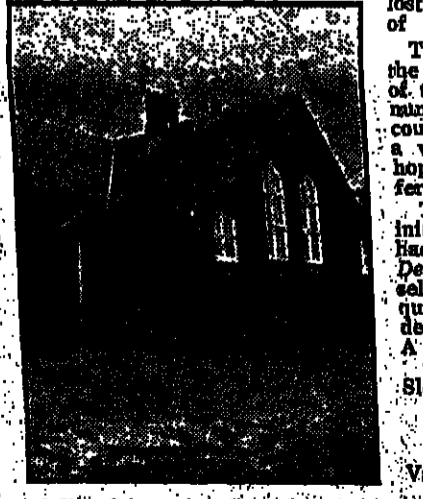
Photographs and layouts of the old buildings are likely to be of interest to teachers continuing to work in cramped rural schools. Clearly lack of space in these old rooms has not prevented the introduction of creative practical work and the well-planned shelving and work top shown in one or two instances should have released the maximum amount of floor space. Layouts suggest, however, that this potential benefit may have been lost by over-provision (or retention) of tables and chairs.

These detailed statements about the old schools—the children's mode of travel and the steady decline in numbers as families moved from country to town—are likely to prove a valuable resource. One hopes all five log books were transferred to the children!

The team concerned with the initial planning of the new building had previously worked together on Design Study 1 and addressed themselves to the specific situation required by the new project in plenary detail: for example, the need for a quiet room for language teaching and a bilingual community.

Sleeping facilities, since the homes of some three and forty-year-olds are likely to be some distance away.

Varying sizes of general work areas to allow for teaching in the morning, and a quiet room for reading, writing and English, and a room to integrate smoothly



Collin Gwynn Primary one of the small village schools integrated into Llangybi.

Flexible furniture

By Owen Surridge

Flexible use of space is a concept that has yet to make any great impact on education outside the primary schools. Economic pressures and changing teaching styles, however, likely to stimulate more interest in adaptable furniture.

The new Desra range of educational furniture provides a number of interchangeable work surfaces that slot on to a standard steel frame. One piece of furniture can be used for art work or eating, simply by switching the top. How it will work in practice remains to be seen.

Teachers and caretakers tend to prefer furniture that requires only the most minor adaptation, but the tops usually remain firmly anchored to the one set of legs. The range includes a variety of table top, angled drawing boards in sizes A1 and A2, sloping at boards, a crafts top and a plastic tray that can be used in conjunction with the tray or either type of drawing board.

Made from wooden chipboard, the tops are laminated with an impact-resistant plastic to chemicals and the other hazards of school use. The drawing boards are surfaced with timber and the tubular steel frames are coated with nylon and fitted with plastic foot pads. They can be stacked or dismantled for storage.

Prices range from £177.50 for the basic frame plus £15 for a table top, £23.45 for an A1 drawing board, £9.75 for a double-sided art unit or £1.60 for a plastic tray. The frame is obtainable in two heights—27½ in and 33½ in; its length is 38 in.

Mobility and duality are the twin selling points of furniture produced by Merricks-Sicomo Ltd., whose notion of fitting wheels to tables and staging relieves teachers and caretakers of the weight-lifting element. When in use, the pieces stand four-square like other furniture, but folding shifts the weight to small wheels and the whole can be rolled away.

The most ingenious of the range is a dining-table unit that provides a folding seat for about a dozen but can be folded flat in one movement and wheeled away, seats and all. The idea stems from the United States where education authorities wished both to avoid the expense of building canteens and to reduce the labour of setting out tables and chairs for other purposes. Merricks-Sicomo say that one person using the unit can set out places for 120 in eight minutes and remove them afterwards at the rate of one a second.

Constructed with chipboard and laminated plastic, the table tops are supported by stainless steel legs so shaped that they also bear seats made with a hard plastic. The seats at each corner are fitted with wheels for ease of feet, and these are brought into use by lifting the table near the middle hinge. The action causes the legs to swing free and stow away between the twin leaves of the table top. Units can be obtained with 8, 12 or 16 seats and at various heights. They cost between £111.40 and £157.

The same company makes a folding U-shaped group teaching table—the teacher sits in the inner part of the U with her pupils spread closely around her—and a mobile study table, the top of which may be unfolded to form the back and sides of one or more carrels. Heights are adjustable and the carrels may be fitted with AV sockets when required. When not in use, the table folds flat and can be stored with others for room division. Merricks-Sicomo also produces mobile seating for school halls.

Nursery schools looking for robust but cheap equipment of the right size could call on Mr Ken Baker's Kid's Kit to help out. He offers a specially designed range of plywood furniture kits; there are rocking chairs, single and double; roller-pusher seats, again in two sizes, and a small table that is also a chair depending on which way you stand it.

Made from birch ply and dowelling that is sanded and ready for assembly and sealing or painting, this furniture should last. A few handy fathers could construct the whole range in an evening. Intended for children up to the age of six, the pieces cost from £8.94 to £13.94.

Another, rather more extensive, range of children's furniture is marketed under the name of *Juni-Kit*. Made from a superior form of corrugated cardboard that was originally designed for freight packaging, the pieces are delivered in flat sheets. The furniture is constructed by bonding, along scored lines, then fixed into permanent shape with the rods and fastenings provided; raw edges are sealed off with special capping strips. The finished article may be given a coating of paint or other covering as required.

The range includes a couple of desks, a toy chest, a chair, shelf units, storage boxes, a screen and a table. Prices vary from £5.40 for the chair to £15.50 for the shelf unit; value-added tax must be added.

Desra furniture is manufactured by Merricks-Sicomo Ltd., PO Box 3, Wythenshawe, Manchester. Merricks-Sicomo, 31 Wates Way, Mitcham, Surrey. Kid's Kit available from Chelsea Furniture Ltd., 15 Old Chelsea Street, London, S.W.3. Juni-Kit style sheets and information from Tri-Wall Containers Ltd., 1 Mount Street, London, W.1.

Planning and equipping a comprehensive school is no small task. Gillian Thomas talks to two men who have done it.

A shop floor view

The first 180 children arrived in September, 1972. The official opening by Lord Pitz of Hampstead took place in October, 1975, and by last year the numbers had been built up to 1,200 children and 70 staff.

When the first pupils go into the sixth form next September the sequence will be complete. The building of the swimming pool, a Red Gr sports area and flood-lighting, which are all additional facilities for both school and community use, should be finished by April, 1978.

Cooperation and compromise have been the key factors in the successful completion, on time, of the mammoth task of equipping the school. Right from the start, the head, 36-year-old David Pery, who was appointed in 1971, made a point of fostering close working relationships between the local education authority officials, his staff and the various contractors.

This led not only to maximum efficiency but also to the creation of a good atmosphere which has had a knock-on effect on the work done at the school itself. As Mr Pery says: "I was largely responsible for co-ordinating the equipping of a school, which was purpose-built at a cost of £1.25m.

The first 180 children arrived in September, 1972. The official opening by Lord Pitz of Hampstead took place in October, 1975, and by last year the numbers had been built up to 1,200 children and 70 staff.

Central to how the school is laid out and equipped is its overall policy of mixed ability teaching, with a highly individualized approach for each child and an emphasis on practicalities.

Mr Pery and Mr Mitchell also insisted that the various departments—like maths, science, French, humanities, creative design (which includes subjects like home economics and woodwork) and English—should be grouped in suites of rooms. Thus they moved the computer room, which had originally been sited in the Phase 1 part of the building, into the maths suite.

In deciding how to lay out and equip each suite, they relied heavily on the housing's subject advisers. Modifications were also made to sports hall could not be duplicated and have to be used on a timetable continued throughout the school.

The overall throughout has been on flexibility to ensure the best rooms and equipment can be used in a variety of contexts. For instance, most rooms have black-out blinds and plenty of electrical points. All departments are equipped to receive television programmes, both live and recorded, relayed from the resources area.

Equipment was similarly chosen for maximum adaptability. For example, there are no desks in the classrooms. Instead, Mr Mitchell uses simple tables which can be arranged in a variety of ways. Fortunately, copying is not a problem because of mixed ability teaching.

As for storage, children have lockers in the form of cubicles where they meet each morning. They then move to the appropriate subject suite where books are kept by the teachers.

Mr Mitchell also arranged for extensive pinboarding to be provided on the walls of the humanities classrooms. He also arranged for carpeting in some areas to cut down noise, but had no say in any of the colour schemes.

Every department is serviced by the resources centre where extensive sound and television equipment is available (including 38 cassette and three video recorders).

"This may sound a lot, but of course we had to justify every item of expenditure to the development officers," explains Mr Mitchell. "Recording facilities are central to much of the English teaching, particularly as communication aids.

"In order to decide what was needed, I asked each department to submit a list: divided into necessities and luxuries. In addition, hours and hours were spent wading through catalogues. We ended up having to cut down by about a third—it was quite a game. But even so we are not complaining. Frequently it was a matter of compromising on quality and flexibility—like getting a book cabinet for £50 instead of a better one for three times as much."

The final choice was governed by basic requirements (tables, carpets, etc.), the needs of each department (extra large sinks in the craft room, a hanging globe in the geography room, which entailed reinforcing the ceiling) and equipment to enable the school as a whole to run smoothly and efficiently.

For example they have invested in high standard reprographic machines including a Romeo duplicator off-set machine, an electronic copier, a laser printer and an electric typewriter—in order to be able to produce their own work sheets and booklets up to professional standards.

Keeping abreast of the latest developments in equipment also presented problems. For example, the move from tape to cassette recorders meant that several machines obtained during Phase 1



"A big sense of satisfaction" David Pery (seated) and Barry Mitchell.

some open-plan areas which they felt would not be conducive to work. Corridors were added to close them in. This has also improved circulation—a major consideration in a school of this size.

An area scheduled as a cloakroom was also converted into a classroom to provide more accommodation. Instead, cost pogs were provided in each room.

A theatre and a drama studio were scheduled for the English department but one was thought to be adequate, so the studio was developed into a resource centre.

Before the building of Phase 2 began, the borough suggested that it might be operated as a self-contained lower school to help new children over the transition period. Mr Pery liked the idea, but when he looked at how it would work in practice he realized the facilities available would have been totally inadequate. Craft rooms, laboratories and a high sixth-form, the library and

were out of date by the time later money was being spent. Fortunately, in this case, the school was able to sell off the original machines and replace them.

But at no time were they able to exceed their budget: £105,000 for Phase 1, £66,000 for Phase 2 and £20,000 for Phase 3. And the money all been spent right at the beginning, it would of course have bought considerably more, but Mr Mitchell leaves very quickly to live with inflation and took prices as definite only when he received his bill. He also got used to the frustrations of waiting for items to arrive. Indeed, he is still waiting for name and number labels for all the doors.

Nevertheless, with the job almost completed, the challenge of starting all over again at another new school appeals to him; he left Wolvehampton where he was head of maths to join the Northumberland Park team.

As for the head himself, whose subject is history, he says he is looking forward to consolidating over the next five years all the work which has gone into the last five.

"Looking back there is a big sense of satisfaction but there is still a vast amount to be done. Any complacency is off-set by the realization that you never really arrive!"

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Architectural Press Ltd., 9 Queen Anne's Gate, London SW1H 9BY

JAPANESE

Architects and the hidden curriculum

By Colin Hardy

A curriculum exists within a framework of attitudes, values, methods of work, procedures and relationships that are rarely formalized in a school except, perhaps, in a series of "school rules". This is the hidden curriculum. It is just as powerful an agent of learning as maths tables, irregular verbs or the geographer's maps.

This area can be indirectly but most surely influenced by the architect within the framework of the brief he is given, and the finance he is allowed by the l.o.a.

The hidden curriculum is concerned with the personal and social relationships that can exist between staff and pupils. A school setting out to ensure that the affective relationships between its pupils and staff are conducive to the first atmosphere for learning can find itself engaged in the battles that must be fought. The battlefield is established by the architect who sowed the seeds of conflict often before the combatants ever met and left the scene, believing he had provided the optimum conditions for human relationships to flourish.

The education authorities believe in wider aspects of learning, especially of a social nature, cannot be disputed. A school conceiving of a broader concept of education than that which is defined in the instrumental curriculum will accept this with alacrity for the opportunities it gives. The irony lies in that the details can be sources of conflict rather than harmony between staff and pupils. The discourse of quality, nature and organization of the provision made by the architect.

One basic determinant of the relationship between teachers and pupils lies in the belief that where both see a system that is fair and sensible, there is less likely to be misunderstanding; but would a 11-yr, 16-year-olds, rocking gently on a new upholstered bench seat, see this if persistently a teacher on social area supervision during the lunch hour tells them to sit still?

Is the teacher being reasonable? What about the teacher who tells off a pupil for kicking the lavatory door open at the bottom with his foot? Unreasonable? Perhaps, but a metal kick plate has already been provided for just such a purpose.

Surely the member of staff on outside break duty is being totally unreasonable in the eyes of the child when he insists that the two first year pupils playing tick and dodging from each other's clutches around a pillar with an attached drain pipe should go elsewhere. Is it fair on a group of pupils that they should be excluded from their social area by a deputy head, who is tired of asking them not to lean on an interval wall with their heels against the bottom of it, while chatting about the success of the local soccer team, or who is going out with whom?

In these instances most adults and children would feel that the teachers are behaving unreasonably. It is just such petty attitudes of teachers that prevent many pupils from enjoying school.

The teachers' actions cannot be excused on the grounds that any of these instances amount to vandalism. Yet the effect is to continuously and imperceptibly erode relationships between the staff and the pupils. And without cause?

A closer investigation would show that the metal legs supporting the upholstered bench seat were fixed on to chiselled by lin screws. Above the kick-plate on the lavatory door was a ventilation grill made of thin moulded plastic.

The problem with the pillar and its drain pipe was that they were attached by a thin plastic fastener in dodging round the pillar with their hands on the pipe for support the fastener breaks, the pipe swings free, and water gushes everywhere when it rains.

The problem for the deputy head was that he knew that the interior wall was merely plaster board covered by hessian, and that anyone leaning against the wall talking can place their heel on the base of the wall, and either through tapping or continual pressure, a hole would grow in size.

The quality of these fixtures is poor, and certainly not able to stand for long the fair wear and tear of young adolescents behaving in a not unreasonable manner. The school has a duty to maintain its environment in good condition. Neither staff nor pupils enjoy working in a tatty room.

For the most part, the pupils do not appreciate that their actions, in a manner how slight and reasonable they appear, are contributing to a situation which they themselves would hate to see. Most staff get no pleasure at bickering at pupils: it is tiresome and unpleasant, and there are more important issues. The same door performs another useful function at break and lunchtime. Both pupils and the noise of their record player can spill into

the library, so detracting from the atmosphere that one wants there. The door can prevent lessons occurring and the confrontations between pupils which sour the atmosphere of the school.

Besides the quality and the provision made by the architect, the manner in which arranged on a wider scale, is a significant factor in the basic law is the "law of effort". The operation of this is seen at a fairly simple level when the human path from a straight line, and the architect's path is constructed at right angle to the same path. To add to the problem, the path is planned by the hysteron proteron.

More serious is the door restricted cloakroom area. It has an exit the other end, strategically sited where the path intersects. The cloakroom has a passage through it, one metre in width between racks on one side, and wide doors which swing out (the passage) to the shortest route between some other teaching area, other half, it is also the shortest route to the changing hall and the other side and their cloakrooms.

Where such a problem has been foreseen, then it is better to have a door which enforces rules to ensure the entrance of the pupils.

In all of the instances mentioned above, the teachers are forced into an untenable position. The use of the facilities of design, and the constructive part to play in the school, is being used to establish better relationships. Building schools with better materials, designing them to be better supervised, and the same door performs another useful function at break and lunchtime. Both pupils and the noise of their record player can spill into

taking over an unmade playground. The site has two advantages. One is uneven ground, so that several different levels are bounded on one side by a wooded area, and the other by a building. The school's pupils would argue, however, their ideas can be adapted to an urban school.

Chalgrove junior school, Oxfordshire, is a hybrid between town and country. The village, on the edge of Oxford, is a mixture of cottages and new housing, and the school, which celebrates its hundredth birthday in November, is in the original village in new classrooms which were built in 1970. The playground is the mixture.

It is divided roughly into areas. The first is a wooden bounded by the original village. The inner aspect of this is covered by a wooden building, under the direction of the school's adviser on horticulture, Miss Humphries, Mr Colin Bell, is a great believer in the natural wood for both imaginative play. Like Miss Humphries, Mr Bell has incorporated his plans and telegraph poles as part of the apparatus. The structures are partly not made of wood, but of metal and plastic. The play structures are partly made of wood, but of metal and plastic. The play structures are partly made of wood, but of metal and plastic.

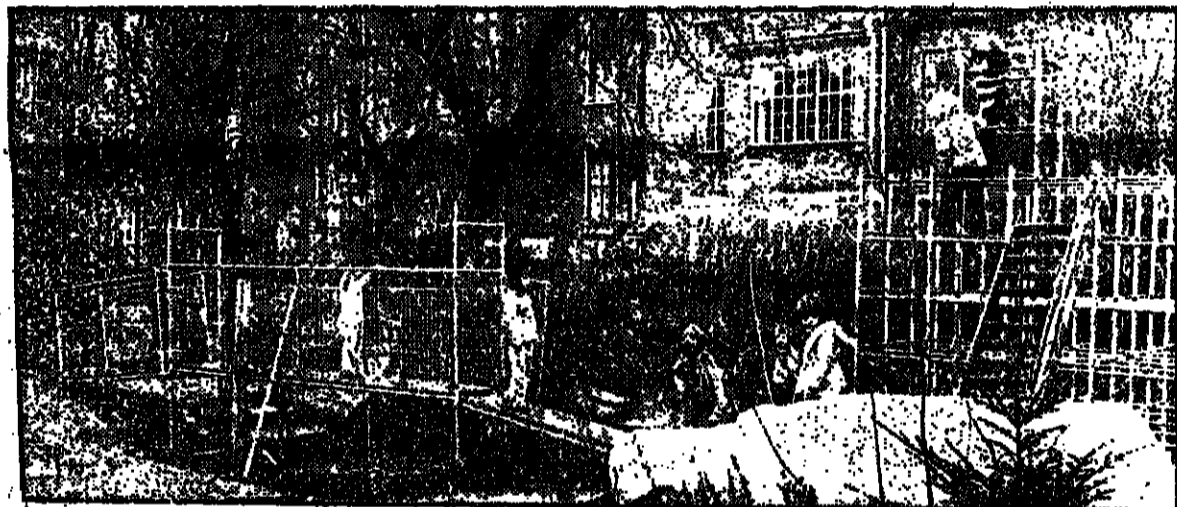
Playgrounds, like gardens, take time to form and grow, as Miss Wilshire of the Chelsea Open Air Nursery School observes. "The instant tree is not yet with us. She is fortunate. When she came to Chelsea from a Bristol Council authority nursery school in 1971, she inherited a piece of land which had been a well-loved garden for centuries, and which had been especially adapted to the needs of children for the last 42 years.

The parents, who founded the school in 1929, chose the property largely for its "lovely garden full of trees, paths, a well, and old houses and many flowers in the back garden." Miss Natalie Davies, recorded in her history of the venture. The well was, of course, filled in, and has been a source of many imaginative games throughout the generations.

The advantage of such a garden is that, being on several levels, it is full of surprising and interesting places that can be explored and changed, and it allows large numbers of children to play in a comparatively restricted area in small, separate groups.

Miss Wilshire wants her open space to fulfil two functions: to provide mysterious areas that will encourage imaginative play, and to present physical challenges. Properly concerned about safety, she is also anxious that adults should not destroy the children's initiative by being over-protective.

The Chelsea garden is continually developing. In one corner there is a large rope climbing net made 30 years ago by a student teacher (and an ex-sailor). Above the well there is an aluminium frame bridge put up by a recent group of parents. Last year, the school's children often found imaginative challenges in more satisfactory and more interesting than commercial products. When it does have to buy anything in, it does so, necessarily, to the makers of nursery equipment. It has found that a do-it-yourself garden shed is much more fun for the children to paint and furnish than the conventional Wendy House: and that many things made especially for nurseries, particularly climbing frames, underestimate the abilities of the children.



Shirley Toulson looks at a variety of play spaces and their equipment

Come out to play

Miss Wilshire regards the time that the children spend in the garden as educationally important, and two members of her staff of five leave the open area as their permanent base: "They see quite a different aspect of a child to the one we see indoors."

Miss Sue Humphries, head of Coombes County Infant School, at Arborfield, in Berkshire, agrees that the playground is a vital part of the school's life. She says: "I often find that the children are more satisfied and more confident when they are in the playground than when they are in the classroom."

She suggests the things which any school can do to make them more interesting. One is to introduce colour. "So often the only colour you'll find in a playground is the green of the grass. The only pieces of bought playground equipment is concrete, a bridge and a set of large stepping stones. Coombes are carrying out an extensive planting programme, as part of a well thought-out landscape. Every time a new element is added to the playground, a pond, which will be properly covered for safety, and carefully set so as to encourage wild life and natural growths is next on the agenda. The playground already contains an insect sanctuary: a small area, walled on three sides, and planted with shrubs that will encourage a wide variety of insect life, but which is otherwise allowed to grow wild.

Areas such as this are used for specific scientific studies. Miss Humphries believes that a playground should provide more than just a stimulus for physical activity and imaginative play. It should also provide a distinction between the "soft" growing areas, which are incorporated into work projects and the "hard" areas which provide for games and social activities. She regards herself as lucky in

the library, so detracting from the atmosphere that one wants there. The door can prevent lessons occurring and the confrontations between pupils which sour the atmosphere of the school.

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News and views from Old Testament times

by Paul Turton

Abraham to King Saul, 1800-1000 BC. 10 15 minute programmes in the Bible News series, Bible News Ltd, 11435 Inc. VAT, Birch of the Christian Church, Bible Study Workcards) 36 cards.

R. H. Horton, Edward Arnold, 235 approx.

I have tried to develop a fresh approach to biblical history which does not indulge in novelty for novelty's sake, but seeks to make sense of the Bible as it is. This book is the first instalment of which, Abraham to King Saul, is now marketed by Encyclopaedia Britannica in the form of 10 cassette or record programmes.

Each programme runs for 15 minutes and is a simulated BBC-type news broadcast of biblical events put into a contemporary setting. Each programme is presented and narrated by correspondents, on-the-spot reporters and even a legal expert gives a convincing verdict.

The technique of breaking into the news to go back for some special event is particularly successful in such items as the fall of Jericho and Samson's destruction of the temple of Dagon. Touches such as the description of a "new two-wheeled chariot which is 'changing modern warfare'" and a statement that the "full list of casualties has just been released" and a note of immediacy and a regular feature on "the man in the news" gives extra substance to the programme.

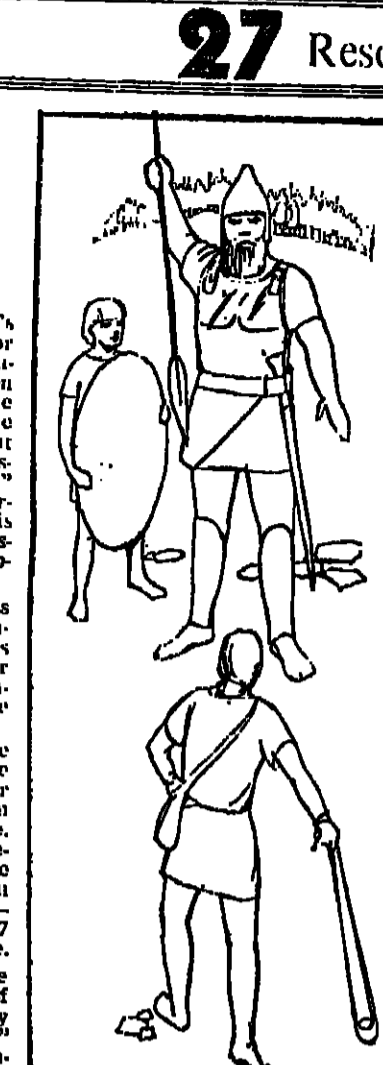
It must be emphasized that though contemporary in format the programmes are totally committed

to presenting the Bible view, man's conversation with God is taken for granted, for example, and the evaluation of the Philistines is that given in the Bible events such as the mass execution of 3,000 after the rebellion against Moses at Mount Sinai are given only a nod of disapproval and the "wall of water" on either side of the Israelites during the crossing of the Red Sea is allowed to stay in spite of its possible misinterpretation and the subsequent need for unlearning.

The basic difficulty with this method is that it has to make concrete in contemporary terms ideas and events which may be better understood in a lively and continuous critical assessment of the text.

In general the programmes move with a pace that should retain the interest of pupils of average or above-average verbal ability from about 13 years of age and above. It is doubtful if the work of preparing a vocabulary list of more difficult words for younger children is worth the effort. The programmes do not command itself to teachers—the notes for teachers suggest 17 such words in the first programme. There is also a tendency for some sequences, such as the account of David slaying Goliath, to be unduly extended for "on-the-spot" sequences and this is not compensated for by eager-sounding speakers. The programmes should also be useful for older students and adults.

Little difficulty will be found in adjusting to the format of the latest in the series of Bible Story Workcards by R. H. Horton, Birth of the Christian Church provides 36 cards each of which is a passage from the New English Bible with an illustration on the reverse with questions to answer. In some cases a cross-reference is provided which can be answered from the passage.



From the booklet which accompanies 'Abraham to King Saul'.

City growth and rural settlement in the USA

by M. J. Clark

The Earth To-Day: North America, 13 City Growth, 14 New York and Mexico City, 15 Metropolitan, 16 Settlements of the Great Lakes and St Lawrence, 17 Settlements of the Prairies and Western Civilization, 18 Nearest coastlands and the St Lawrence, 19 Appalachia. Each 1/1 filmstrip with handbook £2.75. Each cassette £2. Visual Publications, The Green, Northleaf, Cheltenham GL54 3FX.

This well-established series of filmstrips has been extended to include seven new titles. Each is supported by a very useful cassette, optional for the purchaser.

The emphasis is on urban growth in the first five filmstrips while the others are rather more regional and varied. All the filmstrips contain excellent colour photographs with a sound and interesting mixture of maps, prints and old photographs. Each filmstrip is supported by a cassette which conveys in a very comprehensible commentary. The commentator invites participation from students through questions and comments issuing from the illustrations on the filmstrip.

City Growth traces the evolution of settlements in North America from pre-Columbian Indian settlements to Chicago. Historical monuments, site factors and the influence of the railroad and automobile are examined. There is a very interesting case study of an imaginary settlement—Labot—illustrating its characteristic growth from trading post to large industrial city.

New York and Mexico City is a comparative study of two major world cities in terms of location, size and growth. There are some good growth models for both cities.

The difficulty of building Mexico City on former lake deposits, the smog and the metro system are noted and for New York an unusual view is provided by an infrared satellite photograph. There is also a good balance of people and scenes and an instructive contrast between Harlem and Central Park.

Megalopolis examines the growth of the super-city from Boston to Washington, particularly the effects of rapid industrialization and immigration. The most striking frames are outstanding paintings and engravings by Samuel Gerry and several unknown artists showing either scenes or inside views into mills and factories.

The remaining filmstrips take a more general view over wider areas looking at rural settlements as well as larger urban centres such as Quebec, Montreal, Chicago, Calgary, Salt Lake City and Los Angeles. There is a very useful case study of Fort Macleod in 17 which originated in the 1870s as a frontier outpost.

Ten frames are used to demonstrate the features of Salt Lake City which will probably be quite fresh to teachers. Landforms occupy a more significant role in 18 and 19 where do agriculture, forestry and fisheries. There is a special reference to the TVA in 19.

Filmstrips, booklets and cassettes form an excellent teaching package. The booklets contain very full, detailed, background information with advice on use with senior and junior students. The aims of the filmstrips are clearly stated.

This series is useful for straight forward regional geography of North America and in American Studies courses; 13 to 17 inclusive could be used alone as a unit in systematic urban geography. Although very versatile this package seems most appropriate for O and A level examination classes.

Basic for the numerate?

An Introduction to BASIC by M. R. Eagle. G. Bell and Sons Ltd, York House 6, Burgul Street, London WC2. £3.75.

This book is aimed at sixth formers and college students, but it is not clear whether it is for general use or for mathematically able students. Since it presupposes confidence with numbers its usefulness may be limited. An example of this is in the exercises for the LET statement, where the reader is asked to evaluate the product and quotient of numbers in R format.

The book begins with FOR...NEXT loops, which reflects the author's intention to get on with something useful as quickly as possible.

The early introduction of strings is a promising sign, as is a discussion on programme structure. This is unfortunately confused with flowchart structure by missing the point that flowcharts are not only, or even primarily, drawn for the benefit of the original programmer. All the flowcharts and programmes are well structured although it is a pity that BS 4058, a common exam standard, was not followed.

Standard and user defined functions are well explained but anyone hoping to write Monte Carlo method programmes would be misled by the statement that the argument for the random number generator is immaterial and need not even be defined.

Chapter five is solidly mathematical and chapter six introduces arrays. The bubblesort given is surely too crude for this level since the number of comparisons on each loop is not reduced, and a counter is used for noting changes instead of introducing the idea of a flag.

Subroutines are well dealt with and good examples provided, but the author is wrong to advise the unwary that jumping out of a subroutine is acceptable. Most implementations of BASIC make return address and jumping out of subroutines will eventually produce the error message, "Subroutine nested X deep". This will bewilder the beginner who probably has no need of subroutines.

This chapter also introduces the idea of inserting and deleting records using a file simulated by an array. The failure to sort the amendments or to produce a new file means that much of the teaching value in the exercises has been missed. Since the example is introduced as real, one is left to speculate on the timings if the given algorithm had been applied to magnetic tape files.

The book is well designed and produced and has a first-class index. However, the programme will produce an error message and this is not mentioned in the solutions. There is also a misleading passage which suggests that input loops can be terminated by pressing the "Break" key. The introduction also suggests that it is solely the programmer's responsibility if a bill for £20 is produced, which shows a lack of understanding of the way commercial programmes are written. Paul McGee

Lightning tours

...whose idea of a visit to the tower was to rush in, have a quick look at the Mona Lisa and rush out. I had a quick visit to the tower. I saw the Mona Lisa. I saw the tower. I saw the tower. I saw the tower.

...the most famous paintings of the world are housed in the gallery. The guide is in five European languages. Price 20p.

A series of slides from Nicholas Hunter Filmstrips covers the subject of photography. Illustrations shown above are taken from number 1, "History of Early Technical Evolution" which starts with camera obscura and the discoveries of Schuize.

Illustrations below are from number 3, "Cameras" which ranges from the simple, popular sort used by amateurs and holidaymakers to those designed for technical purposes, such as reprographic cameras which are used in offset litho printing.

It shows examples of photo-journalism and advertising and pictures taken in space, underwater and from the air. There are six sets of slides with notes, each costing £2.50 plus VAT from Nicholas Hunter Filmstrips, Munton Yard, 46 Richmond Road, Oxford.



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NOITHAMPTONSHIRE ... SCHOOL FOR ...

Classics Scale 1 Posts

BUCKINGHAMSHIRE ... SCHOOL ...

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Commercial Subjects Other Posts on Scale 2 and above

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Domestic Subjects Heads of Department

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English Heads of Department

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Cambridgeshire Neale Wade School

Headship Group 9

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Cambridgeshire Neale Wade School

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London Borough of Waltham Forest

SECONDARY Modern Languages continued

CITY OF MANCHESTER EDUCATION COMMITTEE

CITY OF SALFORD EDUCATION COMMITTEE

Scale 1 Posts

HEADS OF DEPARTMENT

Scale 1 Posts

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Scale 1 Posts

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OLDHAM EDUCATION COMMITTEE

SURREY EDUCATION COMMITTEE

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WALTHAM FOREST EDUCATION COMMITTEE

WIGAN EDUCATION COMMITTEE

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Lancashire County Council LANCASHIRE EDUCATION COMMITTEE CLOSING DATE 1st AUGUST 1977

LANCASHIRE EDUCATION COMMITTEE Scale 1 Posts

LANCASHIRE EDUCATION COMMITTEE Scale 1 Posts

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 ABRAHAM MOSS CENTRE
 Crescent Road, Manchester M6 6UH
 Tel: 740 1481
 Department of Haldressing and Beauty Therapy
 Required for September, 1977.
LECTURER I IN PHYSIOTHERAPY
 The department wishes to appoint a qualified Physiotherapist to assist the present Physiotherapist in teaching Beauty Therapy to students in this area of beauty therapy relevant to their future careers. Teaching experience in this field would be an added advantage but is not essential.
LECTURER I IN BEAUTY THERAPY
 To teach theory and practice. Applicants must be in possession of the C.G.L.I. qualification and have had a wide experience in this field. A recognised teaching qualification is also essential. Salary scale for both posts: £2,761-£4,689.
 For application forms (returnable by 28th July 1977) and further particulars send a self-addressed, stamped envelope to the Administrative Officer, at the above address. Interviews will be held on Tuesday 22nd August 1977.

BRADFORD COLLEGE
 Applications are invited for the following posts:—
School of Technology and Design
 1. **LECTURER Grade I in AUTOMOBILE ENGINEERING** for session 1977/8 only
 Candidates should be apprentice-trained mechanics and hold City and Guilds Full Technological Certificate in Automobile Engineering and a Certificate in Education.
 2. **LECTURER Grade I/II in MATHEMATICS**
 Applicants should preferably possess a degree in Mathematics and have some knowledge of basic computing principles.
 3. **LECTURER Grade I/II in PRODUCTION ENGINEERING**
 Applicants should have a broad industrial experience including apprenticeship and possess a minimum qualification of City and Guilds Full Technological Certificate.
Student Services
 1. **STUDENT LIAISON OFFICER (Lecturer Grade II)**
 Applicants for this post should preferably be graduates in Physics or Mathematics or English, or be qualified teachers in Physics or English/Recreation, as the successful applicant will be required to undertake some teaching. The successful candidate will be expected to seek another post some 2 years after appointment, although this could be within the College.
 The salaries for the above posts will be in accordance with the Burnham Scales of Salaries for Teachers in Establishments for Further Education:
 Lecturer Grade I — £2,488-£4,377
 Lecturer Grade II — £2,278-£4,163
 plus the supplement of £312 and the recent award up to a maximum of £180 per annum.
 Application forms and further particulars are available from: Staffing Officer, Bradford College, Great Horton Road, Bradford BD7 1AY, and the completed forms should be returned so as to reach him not later than Friday, 8th August, 1977.

WATFORD COLLEGE
HEAD OF DEPARTMENT OF ENGINEERING
 Applications are invited for the above post which will become vacant on 1st September 1977. The work in the Department ranges from Craft to Higher National Certificate level.
 Further details available from:
 The Chief Administrative Officer,
 Watford College, Hempstead Road,
 Watford WD1 3EZ

COLLEGES OF FURTHER EDUCATION
 continued
LONDON
INCH LONDON EDUCATION
HACKNEY COLLEGE
 100, Holloway Road, London N16 9JH
 Telephone: 01-253 7767
 Required for 1st September 1977.
FULL-TIME LECTURER I in BOOK-BINDING
 The Department of Book-Binding is seeking a Lecturer I in Book-Binding. The successful candidate will be responsible for the teaching of book-binding to students on a new 3-year course commencing in 1977.
 Candidates must be qualified teachers.
 Salary on an incremental scale within the range £2,488-£4,377 plus £180 per annum.
 Further details and application forms obtainable from: The Chief Administrative Officer, Inch London Education, 100, Holloway Road, London N16 9JH.
LECTURER I IN BEAUTY THERAPY
 To teach theory and practice. Applicants must be in possession of the C.G.L.I. qualification and have had a wide experience in this field. A recognised teaching qualification is also essential. Salary scale for both posts: £2,761-£4,689.
 For application forms (returnable by 28th July 1977) and further particulars send a self-addressed, stamped envelope to the Administrative Officer, at the above address. Interviews will be held on Tuesday 22nd August 1977.

LOTTHAN
REGIONAL COUNCIL
 EDUCATION COMMITTEE
LECTURER I IN MACHINING PRACTICE
 The Lotthan Regional Council is seeking a Lecturer I in Machining Practice. The successful candidate will be responsible for the teaching of machining to students on a new 3-year course commencing in 1977.
 Candidates must be qualified teachers.
 Salary on an incremental scale within the range £2,488-£4,377 plus £180 per annum.
 Further details and application forms obtainable from: The Chief Administrative Officer, Lotthan Regional Council, 100, Holloway Road, London N16 9JH.
LECTURER I IN ELECTRICITY
 The Lotthan Regional Council is seeking a Lecturer I in Electricity. The successful candidate will be responsible for the teaching of electricity to students on a new 3-year course commencing in 1977.
 Candidates must be qualified teachers.
 Salary on an incremental scale within the range £2,488-£4,377 plus £180 per annum.
 Further details and application forms obtainable from: The Chief Administrative Officer, Lotthan Regional Council, 100, Holloway Road, London N16 9JH.

CITY OF MANCHESTER EDUCATION COMMITTEE
MOSTON COLLEGE OF FURTHER EDUCATION
 100, Moston Road, Manchester M20 2JH
 Telephone: 061 275 1111
 Required for September 1977.
LECTURER I in AUTOMOBILE ENGINEERING
 The Moston College of Further Education is seeking a Lecturer I in Automobile Engineering. The successful candidate will be responsible for the teaching of automobile engineering to students on a new 3-year course commencing in 1977.
 Candidates must be qualified teachers.
 Salary on an incremental scale within the range £2,488-£4,377 plus £180 per annum.
 Further details and application forms obtainable from: The Chief Administrative Officer, Moston College of Further Education, 100, Moston Road, Manchester M20 2JH.

CITY OF MANCHESTER EDUCATION COMMITTEE
ABRAHAM MOSS CENTRE
 Crescent Road, Manchester M6 6UH
 Telephone: 740 1481
 Required for September 1977.
LECTURER I in PHYSICS
 The Abraham Moss Centre is seeking a Lecturer I in Physics. The successful candidate will be responsible for the teaching of physics to students on a new 3-year course commencing in 1977.
 Candidates must be qualified teachers.
 Salary on an incremental scale within the range £2,488-£4,377 plus £180 per annum.
 Further details and application forms obtainable from: The Chief Administrative Officer, Abraham Moss Centre, Crescent Road, Manchester M6 6UH.

CITY OF MANCHESTER EDUCATION COMMITTEE
MANCHESTER COLLEGE OF BUILDING
 100, Oxford Road, Manchester M1 2LQ
 Telephone: 740 1481
 Required for September 1977.
LECTURER I in PHYSICS
 The Manchester College of Building is seeking a Lecturer I in Physics. The successful candidate will be responsible for the teaching of physics to students on a new 3-year course commencing in 1977.
 Candidates must be qualified teachers.
 Salary on an incremental scale within the range £2,488-£4,377 plus £180 per annum.
 Further details and application forms obtainable from: The Chief Administrative Officer, Manchester College of Building, 100, Oxford Road, Manchester M1 2LQ.

SOUTH TYNESIDE
EDUCATION DEPARTMENT
 SOUTH TYNESIDE COLLEGE OF FURTHER EDUCATION
 100, South Tyneside Road, South Tyneside
 Telephone: 0191 253 7767
 Required for September 1977.
LECTURER I in PHYSICS
 The South Tyneside College of Further Education is seeking a Lecturer I in Physics. The successful candidate will be responsible for the teaching of physics to students on a new 3-year course commencing in 1977.
 Candidates must be qualified teachers.
 Salary on an incremental scale within the range £2,488-£4,377 plus £180 per annum.
 Further details and application forms obtainable from: The Chief Administrative Officer, South Tyneside College of Further Education, 100, South Tyneside Road, South Tyneside.

SOUTH TYNESIDE
EDUCATION DEPARTMENT
 SOUTH TYNESIDE COLLEGE OF FURTHER EDUCATION
 100, South Tyneside Road, South Tyneside
 Telephone: 0191 253 7767
 Required for September 1977.
LECTURER I in CHEMISTRY
 The South Tyneside College of Further Education is seeking a Lecturer I in Chemistry. The successful candidate will be responsible for the teaching of chemistry to students on a new 3-year course commencing in 1977.
 Candidates must be qualified teachers.
 Salary on an incremental scale within the range £2,488-£4,377 plus £180 per annum.
 Further details and application forms obtainable from: The Chief Administrative Officer, South Tyneside College of Further Education, 100, South Tyneside Road, South Tyneside.

SOUTH TYNESIDE
EDUCATION DEPARTMENT
 SOUTH TYNESIDE COLLEGE OF FURTHER EDUCATION
 100, South Tyneside Road, South Tyneside
 Telephone: 0191 253 7767
 Required for September 1977.
LECTURER I in MATHEMATICS
 The South Tyneside College of Further Education is seeking a Lecturer I in Mathematics. The successful candidate will be responsible for the teaching of mathematics to students on a new 3-year course commencing in 1977.
 Candidates must be qualified teachers.
 Salary on an incremental scale within the range £2,488-£4,377 plus £180 per annum.
 Further details and application forms obtainable from: The Chief Administrative Officer, South Tyneside College of Further Education, 100, South Tyneside Road, South Tyneside.

SOMERSET
EDUCATION DEPARTMENT
 SOMERSET COLLEGE OF FURTHER EDUCATION
 100, Somerset Road, Somerset
 Telephone: 01471 253 7767
 Required for September 1977.
LECTURER I in PHYSICS
 The Somerset College of Further Education is seeking a Lecturer I in Physics. The successful candidate will be responsible for the teaching of physics to students on a new 3-year course commencing in 1977.
 Candidates must be qualified teachers.
 Salary on an incremental scale within the range £2,488-£4,377 plus £180 per annum.
 Further details and application forms obtainable from: The Chief Administrative Officer, Somerset College of Further Education, 100, Somerset Road, Somerset.

SOMERSET
EDUCATION DEPARTMENT
 SOMERSET COLLEGE OF FURTHER EDUCATION
 100, Somerset Road, Somerset
 Telephone: 01471 253 7767
 Required for September 1977.
LECTURER I in CHEMISTRY
 The Somerset College of Further Education is seeking a Lecturer I in Chemistry. The successful candidate will be responsible for the teaching of chemistry to students on a new 3-year course commencing in 1977.
 Candidates must be qualified teachers.
 Salary on an incremental scale within the range £2,488-£4,377 plus £180 per annum.
 Further details and application forms obtainable from: The Chief Administrative Officer, Somerset College of Further Education, 100, Somerset Road, Somerset.

SOMERSET
EDUCATION DEPARTMENT
 SOMERSET COLLEGE OF FURTHER EDUCATION
 100, Somerset Road, Somerset
 Telephone: 01471 253 7767
 Required for September 1977.
LECTURER I in MATHEMATICS
 The Somerset College of Further Education is seeking a Lecturer I in Mathematics. The successful candidate will be responsible for the teaching of mathematics to students on a new 3-year course commencing in 1977.
 Candidates must be qualified teachers.
 Salary on an incremental scale within the range £2,488-£4,377 plus £180 per annum.
 Further details and application forms obtainable from: The Chief Administrative Officer, Somerset College of Further Education, 100, Somerset Road, Somerset.

SOMERSET
EDUCATION DEPARTMENT
 SOMERSET COLLEGE OF FURTHER EDUCATION
 100, Somerset Road, Somerset
 Telephone: 01471 253 7767
 Required for September 1977.
LECTURER I in PHYSICS
 The Somerset College of Further Education is seeking a Lecturer I in Physics. The successful candidate will be responsible for the teaching of physics to students on a new 3-year course commencing in 1977.
 Candidates must be qualified teachers.
 Salary on an incremental scale within the range £2,488-£4,377 plus £180 per annum.
 Further details and application forms obtainable from: The Chief Administrative Officer, Somerset College of Further Education, 100, Somerset Road, Somerset.

SURREY
EDUCATION DEPARTMENT
 SURREY COLLEGE OF FURTHER EDUCATION
 100, Surrey Road, Surrey
 Telephone: 0181 253 7767
 Required for September 1977.
LECTURER I in PHYSICS
 The Surrey College of Further Education is seeking a Lecturer I in Physics. The successful candidate will be responsible for the teaching of physics to students on a new 3-year course commencing in 1977.
 Candidates must be qualified teachers.
 Salary on an incremental scale within the range £2,488-£4,377 plus £180 per annum.
 Further details and application forms obtainable from: The Chief Administrative Officer, Surrey College of Further Education, 100, Surrey Road, Surrey.

SURREY
EDUCATION DEPARTMENT
 SURREY COLLEGE OF FURTHER EDUCATION
 100, Surrey Road, Surrey
 Telephone: 0181 253 7767
 Required for September 1977.
LECTURER I in CHEMISTRY
 The Surrey College of Further Education is seeking a Lecturer I in Chemistry. The successful candidate will be responsible for the teaching of chemistry to students on a new 3-year course commencing in 1977.
 Candidates must be qualified teachers.
 Salary on an incremental scale within the range £2,488-£4,377 plus £180 per annum.
 Further details and application forms obtainable from: The Chief Administrative Officer, Surrey College of Further Education, 100, Surrey Road, Surrey.

SURREY
EDUCATION DEPARTMENT
 SURREY COLLEGE OF FURTHER EDUCATION
 100, Surrey Road, Surrey
 Telephone: 0181 253 7767
 Required for September 1977.
LECTURER I in MATHEMATICS
 The Surrey College of Further Education is seeking a Lecturer I in Mathematics. The successful candidate will be responsible for the teaching of mathematics to students on a new 3-year course commencing in 1977.
 Candidates must be qualified teachers.
 Salary on an incremental scale within the range £2,488-£4,377 plus £180 per annum.
 Further details and application forms obtainable from: The Chief Administrative Officer, Surrey College of Further Education, 100, Surrey Road, Surrey.

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 Required for September 1977.
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 Candidates must be qualified teachers.
 Salary on an incremental scale within the range £2,488-£4,377 plus £180 per annum.
 Further details and application forms obtainable from: The Chief Administrative Officer, Surrey College of Further Education, 100, Surrey Road, Surrey.

HEREFORD AND WORCESTER
EDUCATION DEPARTMENT
 HEREFORD AND WORCESTER COLLEGE OF FURTHER EDUCATION
 100, Hereford and Worcester Road, Hereford and Worcester
 Telephone: 01432 253 7767
 Required for September 1977.
LECTURER I in PHYSICS
 The Hereford and Worcester College of Further Education is seeking a Lecturer I in Physics. The successful candidate will be responsible for the teaching of physics to students on a new 3-year course commencing in 1977.
 Candidates must be qualified teachers.
 Salary on an incremental scale within the range £2,488-£4,377 plus £180 per annum.
 Further details and application forms obtainable from: The Chief Administrative Officer, Hereford and Worcester College of Further Education, 100, Hereford and Worcester Road, Hereford and Worcester.

HEREFORD AND WORCESTER
EDUCATION DEPARTMENT
 HEREFORD AND WORCESTER COLLEGE OF FURTHER EDUCATION
 100, Hereford and Worcester Road, Hereford and Worcester
 Telephone: 01432 253 7767
 Required for September 1977.
LECTURER I in CHEMISTRY
 The Hereford and Worcester College of Further Education is seeking a Lecturer I in Chemistry. The successful candidate will be responsible for the teaching of chemistry to students on a new 3-year course commencing in 1977.
 Candidates must be qualified teachers.
 Salary on an incremental scale within the range £2,488-£4,377 plus £180 per annum.
 Further details and application forms obtainable from: The Chief Administrative Officer, Hereford and Worcester College of Further Education, 100, Hereford and Worcester Road, Hereford and Worcester.

HEREFORD AND WORCESTER
EDUCATION DEPARTMENT
 HEREFORD AND WORCESTER COLLEGE OF FURTHER EDUCATION
 100, Hereford and Worcester Road, Hereford and Worcester
 Telephone: 01432 253 7767
 Required for September 1977.
LECTURER I in MATHEMATICS
 The Hereford and Worcester College of Further Education is seeking a Lecturer I in Mathematics. The successful candidate will be responsible for the teaching of mathematics to students on a new 3-year course commencing in 1977.
 Candidates must be qualified teachers.
 Salary on an incremental scale within the range £2,488-£4,377 plus £180 per annum.
 Further details and application forms obtainable from: The Chief Administrative Officer, Hereford and Worcester College of Further Education, 100, Hereford and Worcester Road, Hereford and Worcester.

HEREFORD AND WORCESTER
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 Candidates must be qualified teachers.
 Salary on an incremental scale within the range £2,488-£4,377 plus £180 per annum.
 Further details and application forms obtainable from: The Chief Administrative Officer, Hereford and Worcester College of Further Education, 100, Hereford and Worcester Road, Hereford and Worcester.

YOUTH AND COMMUNITY SERVICE
AVON COUNTY COUNCIL
 100, Avon Road, Avon
 Telephone: 01454 253 7767
 Required for September 1977.
LECTURER I in PHYSICS
 The Avon County Council is seeking a Lecturer I in Physics. The successful candidate will be responsible for the teaching of physics to students on a new 3-year course commencing in 1977.
 Candidates must be qualified teachers.
 Salary on an incremental scale within the range £2,488-£4,377 plus £180 per annum.
 Further details and application forms obtainable from: The Chief Administrative Officer, Avon County Council, 100, Avon Road, Avon.

YOUTH AND COMMUNITY SERVICE
AVON COUNTY COUNCIL
 100, Avon Road, Avon
 Telephone: 01454 253 7767
 Required for September 1977.
LECTURER I in CHEMISTRY
 The Avon County Council is seeking a Lecturer I in Chemistry. The successful candidate will be responsible for the teaching of chemistry to students on a new 3-year course commencing in 1977.
 Candidates must be qualified teachers.
 Salary on an incremental scale within the range £2,488-£4,377 plus £180 per annum.
 Further details and application forms obtainable from: The Chief Administrative Officer, Avon County Council, 100, Avon Road, Avon.

YOUTH AND COMMUNITY SERVICE
AVON COUNTY COUNCIL
 100, Avon Road, Avon
 Telephone: 01454 253 7767
 Required for September 1977.
LECTURER I in MATHEMATICS
 The Avon County Council is seeking a Lecturer I in Mathematics. The successful candidate will be responsible for the teaching of mathematics to students on a new 3-year course commencing in 1977.
 Candidates must be qualified teachers.
 Salary on an incremental scale within the range £2,488-£4,377 plus £180 per annum.
 Further details and application forms obtainable from: The Chief Administrative Officer, Avon County Council, 100, Avon Road, Avon.

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 100, Avon Road, Avon
 Telephone: 01454 253 7767
 Required for September 1977.
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 The Avon County Council is seeking a Lecturer I in Physics. The successful candidate will be responsible for the teaching of physics to students on a new 3-year course commencing in 1977.
 Candidates must be qualified teachers.
 Salary on an incremental scale within the range £2,488-£4,377 plus £180 per annum.
 Further details and application forms obtainable from: The Chief Administrative Officer, Avon County Council, 100, Avon Road, Avon.

West Yorkshire
GLANDORGHAN
 Applications are invited from suitably qualified persons for the following posts in the Authority's schools:
SWANSEA COLLEGE OF FURTHER EDUCATION
 HEAD OF DEPARTMENT OF HUMANITIES AND COMMERCE (GRADE 4)
 Applicants should have good academic qualifications and substantial experience in further education. (Post Ref. 1FSC/9.14.77.)
LECTURER I IN WELSH
 To teach Welsh up to G.C.E. 'O' and 'A' level standard, also French to 'O' level. (Post Ref. 1FSC/10.14.77.)
PORT TALBOT COLLEGE OF FURTHER EDUCATION
LECTURER I IN LADIES HAIRDRESSING
 To teach full-time and part-time courses in Ladies Hairdressing (W.I.E.C. No. 760). Applicants should have had wide salon experience and must be registered Hairdressers. A City and Guilds Certificate in Ladies' Hairdressing and previous teaching experience would be advantageous. The ability to teach Boardwork (or Postiche) is essential. (Post Ref. 6PPT/11.14.77.)
LECTURER I IN ELECTRICAL INSTALLATION AND RADIO/T.V.
 To teach City and Guilds Electrical Installation Certificate Final Certificate level. The ability to teach Radio and Television Servicing would be an advantage. Applicants must have experience in electrical contracting and should possess the Full Technological Certificate in Electrical Installation Work. (Post Ref. 6PPT/12.14.77.)
LECTURER I IN GENERAL STUDIES/SOCIOLOGY
 To teach General Studies to students following the City and Guilds Certificate level. The ability to teach Radio and Television Servicing would be an advantage. Applicants must have experience in electrical contracting and should possess the Full Technological Certificate in Electrical Installation Work. (Post Ref. 6PPT/12.14.77.)
LECTURER I IN GENERAL STUDIES/SOCIOLOGY
 To teach General Studies to students following the City and Guilds Certificate level. The ability to teach Radio and Television Servicing would be an advantage. Applicants must have experience in electrical contracting and should possess the Full Technological Certificate in Electrical Installation Work. (Post Ref. 6PPT/12.14.77.)
LECTURER I IN SHORTHAND, TYPING, SECRETARIAL/OFFICE PRACTICE
 To teach Shorthand, Typewriting and Office Skills level (to full-time and part-time students) and Secretarial/Office Practice. Ability to edit educational related subjects an advantage. Candidates should be suitably qualified and preferably have had business and teaching experience. (Post Ref. 6PPT/14.14.77.)
GORSEINON COLLEGE OF FURTHER EDUCATION
LECTURER I IN SCIENCE SUBJECTS
 To teach Mathematics and Human Biology. Applicants should have had business and teaching experience. (Post Ref. 6PPT/15.14.77.)
LECTURER I IN OFFICE SKILLS
 To teach Shorthand, Typewriting and Office Skills level (to full-time and part-time students) and Secretarial/Office Practice. Ability to edit educational related subjects an advantage. Candidates should be suitably qualified and preferably have had business and teaching experience. (Post Ref. 6PPT/14.14.77.)
LECTURER I IN OFFICE SKILLS (TEMPORARY)
 This is a temporary post for two terms in the first instance. (Post Ref. 3FGC/17.14.77.)
NEATH TECHNICAL COLLEGE
LECTURER I IN PHYSICS
 To teach Physics to O.N.C. and 'A' level Physics standard. Applicants should have a good Honours degree, preferably with teaching and industrial experience. An interest in computer studies would be advantageous. (Post Ref. 5PNTC/18.14.77.)
LECTURER I IN PROCESS PLANT OPERATION SUBJECTS (TEMPORARY)
 To teach Process Plant Operation Subjects. Applicants should have a degree in Chemical Engineering or equivalent qualifications and should have industrial and/or teaching experience. This post is temporary for one year only. (Post Ref. 5PNTC/19.14.77.)
 Application forms and further particulars are available from the undersigned on receipt of a stamped, addressed, self-addressed envelope quoting the appropriate post reference.
 The closing date for the receipt of completed application forms is Friday, 8th August, 1977.
 John Beale, Director of Education, Education Department, Princess House, Princess Way, Swansea

West Yorkshire
GLANDORGHAN
 Applications are invited from suitably qualified persons for the following posts in the Authority's schools:
SWANSEA COLLEGE OF FURTHER EDUCATION
 HEAD OF DEPARTMENT OF HUMANITIES AND COMMERCE (GRADE 4)
 Applicants should have good academic qualifications and substantial experience in further education. (Post Ref. 1FSC/9.14.77.)
LECTURER I IN WELSH
 To teach Welsh up to G.C.E. 'O' and 'A' level standard, also French to 'O' level. (Post Ref. 1FSC/10.14.77.)
PORT TALBOT COLLEGE OF FURTHER EDUCATION
LECTURER I IN LADIES HAIRDRESSING
 To teach full-time and part-time courses in Ladies Hairdressing (W.I.E.C. No. 760). Applicants should have had wide salon experience and must be registered Hairdressers. A City and Guilds Certificate in Ladies' Hairdressing and previous teaching experience would be advantageous. The ability to teach Boardwork (or Postiche) is essential. (Post Ref. 6PPT/11.14.77.)
LECTURER I IN ELECTRICAL INSTALLATION AND RADIO/T.V.
 To teach City and Guilds Electrical Installation Certificate Final Certificate level. The ability to teach Radio and Television Servicing would be an advantage. Applicants must have experience in electrical contracting and should possess the Full Technological Certificate in Electrical Installation Work. (Post Ref. 6PPT/12.14.77.)
LECTURER I IN GENERAL STUDIES/SOCIOLOGY
 To teach General Studies to students following the City and Guilds Certificate level. The ability to teach Radio and Television Servicing would be an advantage. Applicants must have experience in electrical contracting and should possess the Full Technological Certificate in Electrical Installation Work. (Post Ref. 6PPT/12.14.77.)
LECTURER I IN GENERAL STUDIES/SOCIOLOGY
 To teach General Studies to students following the City and Guilds Certificate level. The ability to teach Radio and Television Servicing would be an advantage. Applicants must have experience in electrical contracting and should possess the Full Technological Certificate in Electrical Installation Work. (Post Ref. 6PPT/12.14.77.)
LECTURER I IN SHORTHAND, TYPING, SECRETARIAL/OFFICE PRACTICE
 To teach Shorthand, Typewriting and Office Skills level (to full-time and part-time students) and Secretarial/Office Practice. Ability to edit educational related subjects an advantage. Candidates should be suitably qualified and preferably have had business and teaching experience. (Post Ref. 6PPT/14.14.77.)
GORSEINON COLLEGE OF FURTHER EDUCATION
LECTURER I IN SCIENCE SUBJECTS
 To teach Mathematics and Human Biology. Applicants should have had business and teaching experience. (Post Ref. 6PPT/15.14.77.)
LECTURER I IN OFFICE SKILLS
 To teach Shorthand, Typewriting and Office Skills level (to full-time and part-time students) and Secretarial/Office Practice. Ability to edit educational related subjects an advantage. Candidates should be suitably qualified and preferably have had business and teaching experience. (Post Ref. 6PPT/14.14.77.)
LECTURER I IN OFFICE SKILLS (TEMPORARY)
 This is a temporary post for two terms in the first instance. (Post Ref. 3FGC/17.14.77.)
NEATH TECHNICAL COLLEGE
LECTURER I IN PHYSICS
 To teach Physics to O.N.C. and 'A' level Physics standard. Applicants should have a good Honours degree, preferably with teaching and industrial experience. An interest in computer studies would be advantageous. (Post Ref. 5PNTC/18.14.77.)
LECTURER I IN PROCESS PLANT OPERATION SUBJECTS (TEMPORARY)
 To teach Process Plant Operation Subjects. Applicants should have a degree in Chemical Engineering or equivalent qualifications and should have industrial and/or teaching experience. This post is temporary for one year only. (Post Ref. 5PNTC/19.14.77.)
 Application forms and further particulars are available from the undersigned on receipt of a stamped, addressed, self-addressed envelope quoting the appropriate post reference.
 The closing date for the receipt of completed application forms is Friday, 8th August, 1977.
 John Beale, Director of Education, Education Department, Princess House, Princess Way, Swansea

West Yorkshire
GLANDORGHAN
 Applications are invited from suitably qualified persons for the following posts in the Authority's schools:
SWANSEA COLLEGE OF FURTHER EDUCATION
 HEAD OF DEPARTMENT OF HUMANITIES AND COMMERCE (GRADE 4)
 Applicants should have good academic qualifications and substantial experience in further education. (Post Ref. 1FSC/9.14.77.)
LECTURER I IN WELSH
 To teach Welsh up to G.C.E. 'O' and 'A' level standard, also French to 'O' level. (Post Ref. 1FSC/10.14.77.)
PORT TALBOT COLLEGE OF FURTHER EDUCATION
LECTURER I IN LADIES HAIRDRESSING
 To teach full-time and part-time courses in Ladies Hairdressing (W.I.E.C. No. 760). Applicants should have had wide salon experience and must be registered Hairdressers. A City and Guilds Certificate in Ladies' Hairdressing and previous teaching experience would be advantageous. The ability to teach Boardwork (or Postiche) is essential. (Post Ref. 6PPT/11.14.77.)
LECTURER I IN ELECTRICAL INSTALLATION AND RADIO/T.V.
 To teach City and Guilds Electrical Installation Certificate Final Certificate level. The ability to teach Radio and Television Servicing would be an advantage. Applicants must have experience in electrical contracting and should possess the Full Technological Certificate in Electrical Installation Work. (Post Ref. 6PPT/12.14.77.)
LECTURER I IN GENERAL STUDIES/SOCIOLOGY
 To teach General Studies to students following the City and Guilds Certificate level. The ability to teach Radio and Television Servicing would be an advantage. Applicants must have experience in electrical contracting and should possess the Full Technological Certificate in Electrical Installation Work. (Post Ref. 6PPT/12.14.77.)
LECTURER I IN GENERAL STUDIES/SOCIOLOGY
 To teach General Studies to students following the City and Guilds Certificate level. The ability to teach Radio and Television Servicing would be an advantage. Applicants must have experience in electrical contracting and should possess the Full Technological Certificate in Electrical Installation Work. (Post Ref. 6PPT/12.14.77.)
LECTURER I IN SHORTHAND, TYPING, SECRETARIAL/OFFICE PRACTICE
 To teach Shorthand, Typewriting and Office Skills level (to full-time and part-time students) and Secretarial/Office Practice. Ability to edit educational related subjects an advantage. Candidates should be suitably qualified and preferably have had business and teaching experience. (Post Ref. 6PPT/14.14.77.)
GORSEINON COLLEGE OF FURTHER EDUCATION
LECTURER I IN SCIENCE SUBJECTS
 To teach Mathematics and Human Biology. Applicants should have had business and teaching experience. (Post Ref. 6PPT/15.14.77.)
LECTURER I IN OFFICE SKILLS
 To teach Shorthand, Typewriting and Office Skills level (to full-time and part-time students) and Secretarial/Office Practice. Ability to edit educational related subjects an advantage. Candidates should be suitably qualified and preferably have had business and teaching experience. (Post Ref. 6PPT/14.14.77.)
LECTURER I IN OFFICE SKILLS (TEMPORARY)
 This is a temporary post for two terms in the first instance. (Post Ref. 3FGC/17.14.77.)
NEATH TECHNICAL COLLEGE
LECTURER I IN PHYSICS
 To teach Physics to O.N.C. and 'A' level Physics standard. Applicants should have a good Honours degree, preferably with teaching and industrial experience. An interest in computer studies would be advantageous. (Post Ref. 5PNTC/18.14.77.)
LECTURER I IN PROCESS PLANT OPERATION SUBJECTS (TEMPORARY)
 To teach Process Plant Operation Subjects. Applicants should have a degree in Chemical Engineering or equivalent qualifications and should have industrial and/or teaching experience. This post is temporary for one year only. (Post Ref. 5PNTC/19.14.77.)
 Application forms and further particulars are available from the undersigned on receipt of a stamped, addressed, self-addressed envelope quoting the appropriate post reference.
 The closing date for the receipt of completed application forms is Friday, 8th August, 1977.
 John Beale, Director of Education, Education Department, Princess House, Princess Way, Swansea

West Yorkshire
GLANDORGHAN
 Applications are invited from suitably qualified persons for the following posts in the Authority's schools:
SWANSEA COLLEGE OF FURTHER EDUCATION
 HEAD OF DEPARTMENT OF HUMANITIES AND COMMERCE (GRADE 4)
 Applicants should have good academic qualifications and substantial experience in further education. (Post Ref. 1FSC/9.14.77.)
LECTURER I IN WELSH
 To teach Welsh up to G.C.E. 'O' and 'A' level standard, also French to 'O' level. (Post Ref. 1FSC/10.14.77.)
PORT TALBOT COLLEGE OF FURTHER EDUCATION
LECTURER I IN LADIES HAIRDRESSING
 To teach full-time and part-time courses in Ladies Hairdressing (W.I.E.C. No. 760). Applicants should have had wide salon experience and must be registered Hairdressers. A City and Guilds Certificate in Ladies' Hairdressing and previous teaching experience would be advantageous. The ability to teach Boardwork (or Postiche) is essential. (Post Ref. 6PPT/11.14.77.)
LECTURER I IN ELECTRICAL INSTALLATION AND RADIO/T.V.
 To teach City and Guilds Electrical Installation Certificate Final Certificate level. The ability to teach Radio and Television Servicing would be an advantage. Applicants must have experience in electrical contracting and should possess the Full Technological Certificate in Electrical Installation Work. (Post Ref. 6PPT/12.14.77.)
LECTURER I IN GENERAL STUDIES/SOCIOLOGY
 To teach General Studies to students following the City and Guilds Certificate level. The ability to teach Radio and Television Servicing would be an advantage. Applicants must have experience in electrical contracting and should possess the Full Technological Certificate in Electrical Installation Work. (Post Ref. 6PPT/12.14.77.)
LECTURER I IN GENERAL STUDIES/SOCIOLOGY
 To teach General Studies to students following the City and Guilds Certificate level. The ability to teach Radio and Television Servicing would be an advantage. Applicants must have experience in electrical contracting and should possess the Full Technological Certificate in Electrical Installation Work. (Post Ref. 6PPT/12.14.77.)
LECTURER I IN SHORTHAND, TYPING, SECRETARIAL/OFFICE PRACTICE
 To teach Shorthand, Typewriting and Office Skills level (to full-time and part-time students) and Secretarial/Office Practice. Ability to edit educational related subjects an advantage. Candidates should be suitably qualified and preferably have had business and teaching experience. (Post Ref. 6PPT/14.14.77.)
GORSEINON COLLEGE OF FURTHER EDUCATION
LECTURER I IN SCIENCE SUBJECTS
 To teach Mathematics and Human Biology. Applicants should have had business and teaching experience. (Post Ref. 6PPT/15.14.77.)
LECTURER I IN OFFICE SKILLS
 To teach Shorthand, Typewriting and Office Skills level (to full-time and part-time students) and Secretarial/Office Practice. Ability to edit educational related subjects an advantage. Candidates should be suitably qualified and preferably have had business and teaching experience. (Post Ref. 6PPT/14.14.77.)
LECTURER I IN OFFICE SKILLS (TEMPORARY)
 This is a temporary post for two terms in the first instance. (Post Ref. 3FGC/17.14.77.)
NEATH TECHNICAL COLLEGE
LECTURER I IN PHYSICS
 To teach Physics to O.N.C. and 'A' level Physics standard. Applicants should have a good Honours degree, preferably with

Teachers

There are a number of vacancies in the Services of Benue State Schools Board in Nigeria for teachers in the Sciences, Mathematics and English. A Recruitment Delegation will soon be interviewing candidates to fill these posts which offer a lot of challenge and attractive conditions of service. Interested candidates should collect or write for application forms from the Nigeria High Commission, 9 Northumberland Avenue, London, W.C.2.

Completed forms should be returned to the High Commission not later than 30th August, 1977.

Nigeria

NIGERIA

The Mangu Secondary School

Principal: Mr. M. K. Hirse, B.A., Cert. Ed. teachers for September, 1977, or January, 1978, of the following subjects to 'O' level:

Physics, Chemistry, Agricultural Science, Biology, English Language, Fine Art

The Mangu Secondary School, near Jos, has approximately 600 boys and girls aged between 11 and 16. A two-year contract, renewable, is offered with salary on the Nigerian Government Scale plus allowances.

For further information and an application form please write to Mrs. Fouché, Gabbitts-Thring Services Ltd., Broughton House, 6, 7 & 8 Sackville Street, Piccadilly, London W1X 2BR, or telephone her on 01-734 0181.

RESEARCH ASSOCIATE

East-West Center

Research Associate in the Culture Learning Institute to assist as a team member in the "English as an International Auxiliary Language" activity. A Ph.D. or equivalent in the field of English as a Second Language, sociolinguistics, psycholinguistics or applied linguistics. Publications in at least two of three areas: English as an International auxiliary language; first and second language learning; the relation of language to culture. Teaching experience at the graduate level. At least three years experience working with professional educators. U.S. citizens must have lived in an Asian or Pacific country for at least two years and have conversational knowledge of an Asian or Pacific language. Non-U.S. citizens must have lived outside country of origin for at least two years and have excellent command of English.

Apply by September 30, 1977, to East-West Center, Personnel Division, Dept. 205, 1777 East-West Road, Honolulu, Hawaii 96848.

An Equal Opportunity Employer M/F

RESEARCH ASSOCIATE

East-West Center

Research associate in the Culture Learning Institute to engage in team research in the transcultural/transnational education project. Required: Ph.D. or equivalent in education (specifically curriculum design and development), educational anthropology, or directly related field; publications in cross-cultural education; teaching experience; extensive experience in planning, organizing and conducting workshops and training seminars involving individuals from different cultural backgrounds; participation as a team member in a collaborative project that developed and produced educational materials.

Apply by September 15, 1978, to East-West Center, Personnel Division, Dept. 205, 1777 East-West Road, Honolulu, Hawaii 96848.

An Equal Opportunity Employer M/F

OVERSEAS TEACHING POSTS

LECTURER IN ENGLISH LANGUAGE AND LITERATURE (JAPAN)

Osaka University
MA or PhD in English studies, TEFL qualification highly desirable.
Salary: ¥174,000-¥263,000 per month (rate of exchange approx. Yen 460=£1).
Benefits: installation and education grants; 2 year contract renewable. 77 PU 104.

ENGINEER/SUPERVISOR (SPAIN)

The British Council Institute, Madrid
Candidates should be qualified to HNC/City and Guilds Final Certificate Level and have at least 3 years' operations and maintenance experience in a broadcasting or high quality Close Circuit Television Studio. Experience in Studio Lighting and Electronic Editing on 1in. Video Tape Recorders and/or a knowledge of language laboratory equipment would be an advantage.
Salary: £3,950-£8,192 p.a. at present exchange rate plus allowances of up to £1,179 p.a.
Salary and allowances are at present free of local taxation.
Benefits: baggage allowance; rent allowance of approx. £310 p.a.; education allowance; medical scheme; employer's contribution to superannuation and National Insurance. Local contract renewable. 77 RO 128

5 GCE TEACHERS (OMAN)

Teacher of English Language and Literature.
Teacher of Physics.
Teacher of Chemistry.
Teacher of Biology.
Teacher of Mathematics.
Candidates, single men or married teaching couples (without children), must be UK citizens and have a British Educational background. They should have an honours degree in the relevant subject, a teaching certificate and 5 years' teaching experience to GCE 'O' level standard.
Salary: £8,998 p.a. free of local taxation.
Benefits: free furnished accommodation; free electricity and water; annual passage paid home leave; 2 year contracts renewable. 77 AS 88-92.

INSPECTORS OF ENGLISH-PRIMARY (CAMEROON)

Educational Delegations for the East and North Provinces: Bertoua and Garoua.
2 members of a team concerned with the introduction of English in Francophone Primary Schools. To inspect classes, advise teachers, organise in-service courses. Degree (preferably in English or Modern Languages) 1 year University diploma in TEFL relevant experience preferably including teacher training; fluent French. Men only.
Salary: £4,589-£6,818 p.a. plus 10 per cent inducement.
Benefits: personal and children's allowances; free accommodation; 2 year contracts. 77 HE 5-8.

ELT ADVISER (CAMEROON)

South West Provincial Delegation for Education, Buea.
To advise on English Language teaching at Primary, Secondary and Teacher Training levels. Degree teaching qualification and MA in Applied Linguistics (or 1 year University diploma in TEFL/ESL); at least 4 years' relevant experience, preferably overseas and in teacher training; good French.
Salary: £4,589-£6,818 p.a. plus 10 per cent inducement.
Benefits: personal and children's allowances; free furnished accommodation; 2 year contract. 77 HE 8.

2 TEACHERS OF ENGLISH (OMAN)

The British Council, Muttrah
To teach English mainly at elementary and intermediate levels for approximately 24 periods a week. Some overtime work may be required and will be separately remunerated. Candidates, single men only, who will be required to share free furnished accommodation, must have a degree or teaching diploma and an ELT qualification (RBA or postgraduate diploma).
Salary: £3,732-£4,374 p.a. No local taxation.
Benefits: overseas allowances (£1,020-£1,292) 2 year contract, renewable. 77 AO 87 181.

ASSISTANT DIRECTOR OF STUDIES (EFL) (IRAQ)

The British Council Centre of English Studies, Baghdad
To teach general and ESP course, prepare course materials and assist in in-service teacher training, testing, registration and interviewing. Candidates, men only and single (unless wife is a qualified teacher and willing to teach at the Centre), must have a teaching qualification with a significant TEFL/ESL component or general teaching qualification with additional TEFL/ESL qualification, together with 5 years' experience.
Salary: £4,589-£6,818 p.a. No local taxation.
Benefits: overseas allowances; free furnished accommodation; 2 year contract renewable. 77 AO 124.

COMMUNICATION SKILLS IN ENGLISH PROGRAMME, KING ABDUL AZIZ UNIVERSITY, JEDDAH (SAUDI ARABIA)

This Programme has been developed over the last 2 years with British Council professional support and has involved the production of specialised teaching materials for the implementation of English Medium courses in the Faculties of Engineering and Medicine.
Required for September, 1977:

MATERIALS WRITER

The Writer will be responsible to the director for the overall design, construction, and implementation of the academic programmes. Duties will include course design, adaptation of existing programmes, and materials, and some familiarisation teaching at all levels of the Programme. Periods of the contract will be spent in Britain researching educational techniques and materials.
Candidates, men only, must have a Master's degree in TEFL or Applied Linguistics or a higher degree in Science. They should have a thorough knowledge and experience (at least 5 years') of existing ELT materials with particular reference to those designed for students of science and technology.
Salary: £8,794-£13,494 p.a. according to qualifications and experience and proportions of time spent in Jeddah and London. There is no local taxation.
Benefits: free furnished accommodation; single candidates will be required to share; 60 days annual leave; 1 year contracts probably renewable. 77 AO 84-82.

SENIOR TEACHER OF ENGLISH (BAHRAIN)

Al Houra Boys' Secondary School, Manama
Men only, UK citizens with a British Educational background, a degree and several years' teaching experience.
Salary: £4,803-£5,820 p.a. free of local taxation.
Benefits: free furnished accommodation; overseas and children's allowances; 2 year contract renewable. 77 AS 83.

3 TEACHERS OF ENGLISH (OMAN)

Government Preparatory Schools
Candidates, married teaching couples or single men, must have a teaching qualification with English as a major specialisation or a degree in English or a Foreign Language. No teaching experience is required.
Salary: £3,204 p.a. free of local tax.
Benefits: free basic accommodation; 3 month passage paid leave on renewal of contract; 1 year contracts renewable. 77 AS 47-60.

SENIOR TEACHER OF ENGLISH (IRAN)

British Council (for National Iranian Oil Company), Ahwaz
To teach English for special purposes to oil company employees and prepare materials.
Degree of teaching certificate, 1 year postgraduate qualification in TEFL/ESL, and about 6 years' relevant experience, preferably overseas. Single candidates preferred.
Salary: £4,589-£6,818 p.a.
Benefits: Ahwaz allowance £918-£1,124 p.a.; free furnished accommodation; employer's portion of UK superannuation; 2 year contract. 77 HO 128.

Return fares are paid. Local contract is guaranteed with the British Council. Please write, briefly stating qualifications and length of appropriate experience quoting relevant reference number and title of post for further details and an application form to: The British Council (Appointments), 65 Davies Street, London W1V 2AA.



OVERSEAS TEACHING POSTS (CONTINUED)

SCHOOL BURSAR (IRAN)

The British School, Tehran
A co-educational day school (5-13 years)
To be responsible for finance, supervision of accounts, capital funds appeals, maintenance and construction of new premises, staff work permits, etc. lease negotiations, preparation of annual estimates.
Salary according to JNC Scale for Youth and Community Workers.
Applications should be sent to the undersigned, together with the names of two referees, to:
General Manager, British Council, 77 High Street, London E14 3DF, or to the undersigned, 77 High Street, London E14 3DF.

TEACHERS OF ENGLISH (IRAN)

British Council Teaching Centres; Tehran, Meshed, Tabriz
Teaching general English and/or ESP; involvement in programme planning/evaluation, materials development, and participation in staff training programme, including study for RSA CTEFL if required.
Degree or teaching certificate essential; 1 year qualification in TEFL and/or 3 years' experience desirable. Single candidates or married couples both to teach.
Salary: £3,732-£4,374 p.a.
Benefits: accommodation allowance; baggage and installation allowances; employer's portion of UK superannuation; 2 year contracts renewable. 77 HO 80-79.

Local fares are paid. Local contract is guaranteed with the British Council. Please write, briefly stating qualifications and length of appropriate experience quoting relevant reference number and title of post for further details and an application form to: The British Council (Appointments), 65 Davies Street, London W1V 2AA.



Salisbury College of Advanced Education CHIEF LIBRARIAN

The appointee will have responsibility for the development and administration of all Library and Teaching Resources Centre services. Applicants should have demonstrated leadership in the implementation of educational resources programmes and have substantial previous experience at a senior level in a college or university library or resource centre. Applicants should possess an appropriate tertiary qualification and be eligible for associate membership of the Library Association of Australia.
This is an academic appointment at senior lecturer level. (£16,250-£22,500).
Applications in writing giving personal data, details of qualifications and experience, and the names of two referees should reach the College by 31st August, 1977.
They should be addressed to:
Academic Secretary,
Salisbury College of Advanced Education,
Smith Road, Salisbury East,
South Australia 5108, Australia.

Full-Time Wardens Posts

Community Education Service
The Essex Community Education Service offers first opportunities for career advancement, a good training scheme with excellent support services and central resources. A vigorous programme of social and leisure activities provides opportunities for expert advice and assistance. Applicants should be qualified teachers/youth workers.

- Vacancies exist at:
NETSWELL (HARLOW)
WALLEY WAY (LOUGHTON)
WALLEY WAY (LOUGHTON)
WALLEY WAY (LOUGHTON)
WALLEY WAY (LOUGHTON)

Further details and application form from the County Education Officer, Community Education Branch, Three-Roads House, Market Road, Chelmsford.
Essex County Council

YOUTH AND COMMUNITY SERVICE continued

KENT

YOUTH WORKER
The Kent Youth Centre
Applications are invited from suitably qualified youth workers for the post of Youth Worker in the Kent Youth Centre. The duties will include the operation of a youth club, the provision of facilities for the young people, and the supervision of staff. The post offers great scope for a person with local, drive and initiative.
Salary according to JNC Scale for Youth and Community Workers.
Applications should be sent to the undersigned, together with the names of two referees, to:
General Manager, British Council, 77 High Street, London E14 3DF, or to the undersigned, 77 High Street, London E14 3DF.

LAMBETH

YOUTH WORKER
The Lambeth Youth Centre
Applications are invited from suitably qualified youth workers for the post of Youth Worker in the Lambeth Youth Centre. The duties will include the operation of a youth club, the provision of facilities for the young people, and the supervision of staff. The post offers great scope for a person with local, drive and initiative.
Salary according to JNC Scale for Youth and Community Workers.
Applications should be sent to the undersigned, together with the names of two referees, to:
General Manager, British Council, 77 High Street, London E14 3DF, or to the undersigned, 77 High Street, London E14 3DF.

UNITED ARAB EMIRATES

TECHNICAL DRAWING
The United Arab Emirates
Applications are invited from suitably qualified technical drawing teachers for the post of Technical Drawing Teacher in the United Arab Emirates. The duties will include the operation of a technical drawing class, the provision of facilities for the young people, and the supervision of staff. The post offers great scope for a person with local, drive and initiative.
Salary according to JNC Scale for Youth and Community Workers.
Applications should be sent to the undersigned, together with the names of two referees, to:
General Manager, British Council, 77 High Street, London E14 3DF, or to the undersigned, 77 High Street, London E14 3DF.

WARWICKSHIRE

WOLSTON HIGH SCHOOL
YOUTH WORKER
Applications are invited from suitably qualified youth workers for the post of Youth Worker in the Wolston High School. The duties will include the operation of a youth club, the provision of facilities for the young people, and the supervision of staff. The post offers great scope for a person with local, drive and initiative.
Salary according to JNC Scale for Youth and Community Workers.
Applications should be sent to the undersigned, together with the names of two referees, to:
General Manager, British Council, 77 High Street, London E14 3DF, or to the undersigned, 77 High Street, London E14 3DF.

WIGAN

WIGAN BOYS' CLUB
YOUTH WORKER
Applications are invited from suitably qualified youth workers for the post of Youth Worker in the Wigan Boys' Club. The duties will include the operation of a youth club, the provision of facilities for the young people, and the supervision of staff. The post offers great scope for a person with local, drive and initiative.
Salary according to JNC Scale for Youth and Community Workers.
Applications should be sent to the undersigned, together with the names of two referees, to:
General Manager, British Council, 77 High Street, London E14 3DF, or to the undersigned, 77 High Street, London E14 3DF.

YOUTH CENTRE

YOUTH CENTRE
Applications are invited from suitably qualified youth workers for the post of Youth Worker in the Youth Centre. The duties will include the operation of a youth club, the provision of facilities for the young people, and the supervision of staff. The post offers great scope for a person with local, drive and initiative.
Salary according to JNC Scale for Youth and Community Workers.
Applications should be sent to the undersigned, together with the names of two referees, to:
General Manager, British Council, 77 High Street, London E14 3DF, or to the undersigned, 77 High Street, London E14 3DF.

YOUTH & COMMUNITY WORKER

Graham Park Youth Centre
Applications from suitably qualified and experienced Youth and Community Workers and Teachers required for Leader-in-Charge.
Person appointed will be involved with other staff in the development of the community and social education of Centre and its surrounding education campus.
Separation allowance and 100 per cent of removal expenses may be paid.
Further details and application form from the Director of Educational Services, Town Hall, Fifth Bampfylde, London N11 3DL, Ref: ADM/E/197 returnable by the 31st August 1977.

Overseas Appointments

SWAZILAND

SWAZILAND
Applications are invited from suitably qualified teachers for the post of Teacher in the Swaziland. The duties will include the operation of a class, the provision of facilities for the young people, and the supervision of staff. The post offers great scope for a person with local, drive and initiative.
Salary according to JNC Scale for Youth and Community Workers.
Applications should be sent to the undersigned, together with the names of two referees, to:
General Manager, British Council, 77 High Street, London E14 3DF, or to the undersigned, 77 High Street, London E14 3DF.

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Salary according to JNC Scale for Youth and Community Workers.
Applications should be sent to the undersigned, together with the names of two referees, to:
General Manager, British Council, 77 High Street, London E14 3DF, or to the undersigned, 77 High Street, London E14 3DF.

UNITED ARAB EMIRATES

UNITED ARAB EMIRATES
Applications are invited from suitably qualified teachers for the post of Teacher in the United Arab Emirates. The duties will include the operation of a class, the provision of facilities for the young people, and the supervision of staff. The post offers great scope for a person with local, drive and initiative.
Salary according to JNC Scale for Youth and Community Workers.
Applications should be sent to the undersigned, together with the names of two referees, to:
General Manager, British Council, 77 High Street, London E14 3DF, or to the undersigned, 77 High Street, London E14 3DF.

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Salary according to JNC Scale for Youth and Community Workers.
Applications should be sent to the undersigned, together with the names of two referees, to:
General Manager, British Council, 77 High Street, London E14 3DF, or to the undersigned, 77 High Street, London E14 3DF.

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Salary according to JNC Scale for Youth and Community Workers.
Applications should be sent to the undersigned, together with the names of two referees, to:
General Manager, British Council, 77 High Street, London E14 3DF, or to the undersigned, 77 High Street, London E14 3DF.

GOVERNMENT OF BERMUDA MINISTRY OF EDUCATION TEACHING VACANCIES

September 1977.
Applications are invited from certificated or trained graduate teachers for appointment to the following vacancies in September, 1977. The successful applicants will be expected to be available to commence duties on September 6.
(1) Warwick Secondary School: Coeducational secondary school.
Metalwork. Ability to help with Mathematics an advantage.
Applications to Senior Education Officer, Administration and Personnel, Department of Education, PO Box 1155, Hamilton S, Bermuda.
(2) The Berkeley Institute: Coeducational secondary school.
Technical Drawing.
Applications to Principal, The Berkeley Institute, Pembroke West, Bermuda.

CONDITIONS OF SERVICE:—
Salaries: £2,300 to £5,250 per annum depending on qualifications and experience (under review).
Baggage Allowance: Some assistance provided for shipping personal effects.
Passages: Air passages to and from Bermuda for teacher, wife and dependent children under the age of 18 years (unmarried), but excluding the equivalent of four adult passages. Paid return leave passages between engagements.
Government Health Scheme: Medical and surgical benefits.
Superannuation: United Kingdom employer's contribution guaranteed.
Application by airmail, providing a full curriculum vitae including: full name, date of birth, place of birth, marital status and dependents, nationality, small photograph, college(s) attended, degree work and professional training (with dates of qualification), teaching experience, two test-months, and the names of two persons who will be willing to provide confidential (professional) references, national insurance number.

NEW ZEALAND Secondary Teachers

Applications are invited from well qualified teachers for appointment to New Zealand State Secondary Schools to commence on February 1, 1978, or soon after.
Teachers of:
Mathematics, Science, Accounting and Economics, Technical Drawing, Music, Art and Craft, Commercial Subjects (Shorthand, Typing, Business Studies), English.

Applicants must:
Be teacher trained
Hold an appropriate degree or qualification
Have recent teaching experience
Salaries according to qualifications and experience.
Examples of current rates are:

Certificated Teachers			
BA or BSc (1st or 2nd Hon.)	2nd Year	4th Year	7th Year
Teaching	Teaching	Teaching	Teaching
NZ\$7,687	NZ\$8,383	NZ\$10,821	NZ\$11,021
UK£4,260	UK£4,841	UK£5,942	UK£5,942

Trained Teachers Certificate Only
2nd Year 4th Year 7th Year
Teaching Teaching Teaching
NZ\$9,933 NZ\$6,540 NZ\$7,867
UK£5,329 UK£3,684 UK£4,290

Additional NZ\$365 cost of living allowance is payable on all salaries. (NZ\$1 equals UK£0.5695).
Good opportunities for promotion to positions of responsibility.

Limited number of appointees will be offered payment of fares and assistance with other expenses subject to completing a bond to teach in New Zealand State Schools for three years. Other appointments will be offered to teachers who are prepared to meet all costs incurred in travelling to New Zealand. No bond will be required in these cases.
All appointees must be able to meet the standard immigration criteria governing permanent entry to New Zealand (age limit 45 years).
Selected applicants will be interviewed in London by a New Zealand Education Department Officer in August or September. Travelling expenses for interview will be paid.
For further information and application forms, please write as soon as possible to:—
Education
C/o Chief Migration Officer,
New Zealand High Commission,
Haymarket,
LONDON SW1Y 4TG.

HERTFORDSHIRE COUNTY COUNCIL EDUCATION COMMITTEE

County Adviser in Nursery Education

Salary scale (Head Teacher Group 9) £7,620 x £156(4) to £8,244 (inclusive)

Applications are invited for this post which becomes vacant on 1 January, 1978. Candidates should be well qualified and experienced in nursery and infant education and in the training of NNEB students.

Applications by letter with the names of two referees to County Education Officer (Ref. AFS/608), County Hall, Hertford, from whom further details may be obtained. Closing date 12 August, 1977.

Recreation Department Sports Officer

(REC. 14) Principal Officer Grade 1 (1-5) - incl. salary scale £5,329 - £5,890

As Head of Sports Division, post is responsible to Chief Recreation Officer for the efficient running of all sports facilities in the District and the promotion of sporting activities for all sections of the community.



CAMBRIDGESHIRE Careers Service

Careers Officer

For careers guidance and placing work with handicapped young people in Special Schools in the Peterborough and Fenland areas. Post will include pupils in some secondary schools in Peterborough.

Application form and further information from Mr. K. Gostage, Deputy Principal-Careers Officer, Townhill, Peterborough, quoting Ref. CAS18.

Assistant Education Officer

26,382-£7,030 Schools Section Suitably qualified man or woman with a professional teaching qualification (required for the post of Assistant Education Officer (fourth tier post) to be responsible through the Assistant Controller Education Services (Schools) for Nursery and Primary Education.

Application forms from the Assistant Controller (Manpower Services), quoting ref: E/E14, TER/E14, London Borough of Harrow, PO Box 57, Civic Centre, Harrow, Middlesex HA1 2XP returnable within 14 days. 24 hour Answerphone service 01-893 8270.

Harrow Education

OVERSEAS Appointments continued

KUWAIT EDUCATIONAL CENTRE: require qualified and experienced teachers with a minimum of 5 years' experience in English and two years' experience in Arabic.

SOUTH AMERICA: require a major British School in South America. Candidates should be well qualified and experienced in primary and infant education.

NETHERLANDS: require a major British School in the Netherlands. Candidates should be well qualified and experienced in primary and infant education.

NETHERLANDS: require a major British School in the Netherlands. Candidates should be well qualified and experienced in primary and infant education.

TANZANIA INTERNATIONAL SCHOOL: require a major British School in Tanzania. Candidates should be well qualified and experienced in primary and infant education.

WEST GERMANY: require a major British School in West Germany. Candidates should be well qualified and experienced in primary and infant education.

AFRICA: require a major British School in Africa. Candidates should be well qualified and experienced in primary and infant education.

GERMANY: require a major British School in Germany. Candidates should be well qualified and experienced in primary and infant education.

GREECE: require a major British School in Greece. Candidates should be well qualified and experienced in primary and infant education.

KENYA: require a major British School in Kenya. Candidates should be well qualified and experienced in primary and infant education.

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GREECE

TEACHERS required to teach English and Greek in a major British School in Greece. Candidates should be well qualified and experienced in primary and infant education.

IRAN (Persia): require a major British School in Iran. Candidates should be well qualified and experienced in primary and infant education.

SPAIN: require a major British School in Spain. Candidates should be well qualified and experienced in primary and infant education.

ROMANIA: require a major British School in Romania. Candidates should be well qualified and experienced in primary and infant education.

ITALY: require a major British School in Italy. Candidates should be well qualified and experienced in primary and infant education.

SPAIN: require a major British School in Spain. Candidates should be well qualified and experienced in primary and infant education.

NETHERLANDS: require a major British School in the Netherlands. Candidates should be well qualified and experienced in primary and infant education.

TANZANIA: require a major British School in Tanzania. Candidates should be well qualified and experienced in primary and infant education.

WEST GERMANY: require a major British School in West Germany. Candidates should be well qualified and experienced in primary and infant education.

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HAMMERSMITH (London Borough of)

AUDIO-VISUAL OFFICER: require a major British School in Hammersmith. Candidates should be well qualified and experienced in primary and infant education.

NETHERLANDS: require a major British School in the Netherlands. Candidates should be well qualified and experienced in primary and infant education.

TANZANIA: require a major British School in Tanzania. Candidates should be well qualified and experienced in primary and infant education.

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RECREATION ASSISTANT

require a major British School in Recreation. Candidates should be well qualified and experienced in primary and infant education.

NETHERLANDS: require a major British School in the Netherlands. Candidates should be well qualified and experienced in primary and infant education.

TANZANIA: require a major British School in Tanzania. Candidates should be well qualified and experienced in primary and infant education.

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Intermediate Treatment Co-ordinating Officer

£3,858 - £4,194* Dorking

The work involves the development of intermediate treatment facilities in the South East Division of Surrey.

Application forms and further details from Director of Social Services (VJD), Surrey House, 34 Eden Street, Kingston upon Thames, Surrey. Closing date: 1 August.



Methodist Church Division of Education and Youth ADMINISTRATIVE ASSISTANT

for Church-based Children's Work and Primary Education

Clerical support given, but ability to type an advantage.

Application forms (returnable on or before 5th August) and Description of Post obtainable from the General Manager, Methodist Church Division of Education and Youth, 2 Chester House, Pages Lane, Muswell Hill, London N10 1PR.

CENTRE FOR INFORMATION AND ADVICE ON EDUCATIONAL DISADVANTAGE

The Centre is an independent organisation to promote good practice in the education of the individually disadvantaged at all stages, taking into account the distinct needs of disadvantaged minority groups.

A DIRECTOR: is now required to succeed Mr. C. D. Roberts, HMI, at the termination of his secondment on 1 April, 1978.

Application forms and further details available from the Chief Personnel and Management Services Officer (Ref. 33), Westoe Hall, Westoe Village, South Shields, Tyne and Wear (South Shields 552191).

City of Salford LIBRARIANS

Salary Scale £2,127-£3,262 (qualification bar at £2,855. Minimum salary of £2,622 payable to chartered librarians plus supplementary allowances).

ADVISER FOR ART AND LIGHT CRAFTS

SALARY-Southern Range Head Teacher Group 9 £7,767 - £8,391 pa including LW and Supplement

We are seeking an Art Specialist with substantial and varied teaching experience to fill a new post in our Advisory Team.

Application forms and further details available from the Chief Personnel and Management Services Officer (Ref. 33), Westoe Hall, Westoe Village, South Shields, Tyne and Wear (South Shields 552191).

ADMINISTRATIVE ASSISTANT

Applications are invited from suitably qualified and experienced candidates for the post of Administrative Assistant in the Registrar's Office.

Application forms and further details from the Registrar, City of Salford, Salford, Greater Manchester M6 6PU. Closing date: 1 August.

EDUCATIONAL PSYCHOLOGISTS

Applications are invited from suitably qualified and experienced candidates for the post of Educational Psychologist in the Registrar's Office.

Application forms and further details from the Registrar, City of Salford, Salford, Greater Manchester M6 6PU. Closing date: 1 August.

THE SCHOOLS OF KING EDWARD THE SIXTH IN BIRMINGHAM

comprise two Direct Grant Schools, now becoming independent, and five Voluntary Aided Grammar Schools providing academically selective education for over 4,000 pupils.

Secretary to the Governors and Head of the Foundation Administrative Office

who is responsible to the Governors for the Foundation affairs and the maintenance of the Schools, including budgeting, financial control and investment management.

Application forms and further details from the Staffing Secretary (Dept TS), National Children's Home, 85 Highbury Park, London N5 1UD.

NATIONAL FOUNDATION FOR EDUCATIONAL RESEARCH IN ENGLAND AND WALES

Assistant Research Officer (Grade 3)/Research Officer

Local Authorities and Schools Item Banks

Applicants for this post should have experience of teaching language to pupils aged 9-13 and a specialised background in either English or language learning.

Application forms and further details from the Staffing Secretary (Dept TS), National Children's Home, 85 Highbury Park, London N5 1UD.

PONTEFRACCT ACTIVITY CENTRE - YORKSHIRE PROJECT WORKER

£2,529-£3,702 p.a. + £312 p.a. Supplement + Phase II

Required for a mixed disciplinary team on this youth social work project for children and young people aged 5-17 years in group and individual settings.

Application forms and further details from the Staffing Secretary (Dept TS), National Children's Home, 85 Highbury Park, London N5 1UD.



NATIONAL CHILDREN'S HOME BIRMINGHAM

Required for September, 1977: DEPUTY (EDUCATION)

Applications are invited from qualified and well experienced Nursery School Teachers, preferably with experience in areas of social need, to take charge of the educational programme at this Day Centre for 74 children.

Application form and further details from the Staffing Secretary (Dept TS), National Children's Home, 85 Highbury Park, London N5 1UD.

EDUCATIONAL PSYCHOLOGIST

Child and Family Guidance Service

We seek an enterprising and able educational psychologist, interested in working in a School Psychological Service and multi-disciplinary Child Guidance team.

Application forms and further details from the Staffing Secretary (Dept TS), National Children's Home, 85 Highbury Park, London N5 1UD.

NATIONAL FOUNDATION FOR EDUCATIONAL RESEARCH IN ENGLAND AND WALES

Assistant Research Officer (Grade 3)/Research Officer

Local Authorities and Schools Item Banks

Applicants for this post should have experience of teaching language to pupils aged 9-13 and a specialised background in either English or language learning.

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